

# Health Risk Behaviors of Kansans 1996

State of Kansas  
Bill Graves, Governor

Kansas Department of Health and Environment  
Gary R. Mitchell, Secretary

Division of Health  
Steven R. Potsic, MD, MPH, Director

## **Report Preparation:**

### **Primary Author:**

Michael Perry, Program Coordinator, Behavioral Risk Factor Surveillance System,  
Bureau for Disease Prevention and Health Promotion

### **Editors:**

Henry Miller, JD, MPH, Epidemiologist, Bureau for Disease Prevention and Health  
Promotion

Stephen Pickard, MD, Medical Epidemiologist, Bureau for Disease Prevention and  
Health Promotion

Jennie Tasheff, MPH, Program Coordinator, Healthy Kansans 2000, Bureau for  
Disease Prevention and Health Promotion

Steven R. Potsic, MD, MPH, Director, Division of Health

## **Project Funding:**

Funding for the 1996 Behavioral Risk Factor Survey was provided by a grant award  
from the Centers for Disease Control and Prevention, Atlanta, GA.

**Kansas Department of Health and Environment  
Bureau for Disease Prevention and Health Promotion  
February 1998**

## ACKNOWLEDGEMENTS

This report was prepared by the Bureau for Disease Prevention and Health Promotion (BDPHP) within the Kansas Department of Health and Environment (KDHE). It is part of the Department's ongoing commitment to assess lifestyle-related health behaviors of Kansans. The health information contained in this report will assist public health leaders in effectively targeting program interventions that decrease the risk of chronic diseases, acute illnesses, injuries, and premature death.

Special recognition is extended to the survey staff who made the 1996 Kansas Behavioral Risk Factor Surveillance Survey possible. Their dedication and perseverance resulted in data that are highly representative of health behaviors in the Kansas population.

Survey Director:  
Michael Perry

Telephone Interviewers:

Monica Esquibel  
Marisela McCoy  
LaShauna White

Kathy Norris  
Michael Christopher  
Diane Lavis

Andolyn DeLisle  
Denver Washington

A special thank you also goes to the staff of the Bureau of Disease Prevention and Health Promotion for sharing office space and equipment with interviewers, to the Office of Public Information for assistance in publicizing the survey results, and to the Centers for Disease Control and Prevention staff for their technical support and assistance with the analysis of the data.

The survey staff also extend their thanks to the residents of Kansas who participated in the survey. The information gathered during the survey will serve as a basis for evaluating our progress towards achievement of the Kansas Department of Health and Environment mission to protect and improve the health and environment of Kansans through the wise stewardship of resources.

The BDPHP welcomes comments and suggestions on the content and format of this report and on the data reported. Additional statistics not contained in this report may be available upon request. Please direct all comments, questions, and requests to:

BRFSS Program Coordinator  
Kansas Department of Health and Environment  
Bureau for Disease Prevention and Health Promotion  
Landon State Office Building, Suite 901N  
Topeka, Kansas 66612-1290  
(785) 296-1207



## EXECUTIVE SUMMARY

To determine the behavioral risk factors for chronic diseases and injury, the Kansas Department of Health and Environment utilizes the Behavioral Risk Factor Surveillance System (BRFSS) to conduct a representative state-wide telephone survey of Kansas residents, aged 18 and older. Throughout the 1996 calendar year, 2,008 Kansans were surveyed to assess their knowledge, attitudes, and health behaviors that contribute to unnecessary disability, disease, and premature death in Kansas. This report presents the results of the fifth in a series of surveys conducted to identify behavioral health risk trends in Kansas. Highlights from the Kansas 1996 Behavioral Risk Factor Survey are presented below.

**Cigarette Use:** Over a fifth (22%) of Kansans were current cigarette smokers.

**Smokeless Tobacco Use:** Nine percent of male Kansans used smokeless tobacco products.

**Overweight:** A quarter (26%) of Kansans were overweight.

**Fruit and Vegetable Consumption:** Over a quarter (28%) of Kansans consumed the recommended five or more servings of fruits and vegetables a day.

**Physical Activity:** Three-fifths (58%) of Kansans had sedentary lifestyles and 36% did not engage in any form of physical activity. Less than a fifth (18%) of adult Kansans engaged in physical activity at least five times a week for 30 minutes each time.

**HIV/AIDS:** Eight percent of Kansans aged 18-64 believed themselves to be at either medium or high risk for contracting the HIV virus. Almost a third (30%) of Kansans reported they had been tested for the HIV virus.

**Diabetes:** Four percent of Kansans had been told by a doctor that they had diabetes.

**Breast Cancer Screening:** One-sixth (16%) of female Kansans aged 20 and older had not received a recent clinical breast examination. Thirty percent of women aged 40 to 49 had not received a mammogram within the past two years. Over a third (36%) of women aged 40 and older had not received a clinical breast exam and/or a mammogram within the past two years.

**Cervical Cancer Screening:** A fifth (19%) of female Kansans aged 18 and older with a uterine cervix had not received a Pap smear test within the past two years.

**Health Care Coverage:** A tenth (10%) of Kansans had no form of health care coverage.

**Violence and Crime:** Three-tenths (31%) of Kansans were afraid to leave their home at night. Eight percent of Kansans reported that they had seen someone hurting or trying to hurt someone else in their neighborhood during the last year. Nearly a third (30%) of Kansans reported that they had seen or known someone who had been beaten or otherwise hurt by their spouse or partner.

**Arthritis:** A third (34%) of Kansans reported that they had pain, aching, stiffness, or swelling in or around a joint during the past twelve months. Over a fifth (21%) of Kansans reported that had been told by a doctor that they had arthritis.

**Falls:** Among Kansans aged 65 and older, one-sixth (16%) reported that they had fallen during the past 12 months.

**Activity Limitations:** One-seventh (15%) of Kansans reported some type of activity limitation caused by an impairment or health problem. One-sixth (16%) of Kansans aged 65 and older needed help with routine care needs such as everyday household chores, doing necessary business, shopping or getting around for other purposes. Six percent of Kansans aged 65 and older reported that they needed help with their personal care needs such as eating, bathing, dressing, or getting around the house.

**Fire Safety:** Eleven percent of Kansans did not have an installed and working smoke detector in their home.

**Dental Health:** A third (32%) of Kansans had not been to a dentist or a dental clinic during the last year. One-seventh (15%) of Kansans reported that they needed dental work including fillings, dentures, partials, caps, crowns, or root canal. Over two-fifths (42%) of Kansans reported that they lacked any form of dental coverage.

**Preventive Counseling:** When asked if they had ever been counseled by a doctor or health professional, 21% of Kansans reported they had been counseled about their diet or eating habits; 21% about physical activity and exercise; 10% about injury prevention; 8% about alcohol use; 7% about drug abuse; and 18% of Kansans aged 18 to 64 had been counseled about sexual practices including family planning, sexually transmitted diseases, AIDS, and condom use. Among current cigarette smokers, 66% had been advised by a doctor or health professional to quit smoking.

# TABLE OF CONTENTS

Acknowledgements .....	2
Executive Summary .....	3
Table of Contents .....	5
List of Tables .....	6
List of Figures .....	7
Introduction .....	14
Methodology .....	15
Interpretation of Results .....	16
Cigarette Use .....	20
Smokeless Tobacco Use .....	24
Overweight .....	26
Fruit and Vegetable Consumption .....	28
Physical Activity .....	30
HIV/AIDS .....	34
Diabetes Mellitus .....	38
Breast Cancer Screening .....	40
Cervical Cancer Screening .....	44
Health Care Coverage and Access to Health Care .....	46
Violence and Crime .....	50
Arthritis .....	52
Falls .....	56
Activity Limitations .....	58
Fire Safety .....	60
Dental Health .....	62
Preventive Counseling .....	66
Healthy Kansans 2000 Objectives Measured By BRFSS Data .....	68
References .....	69
Appendices .....	71

# LIST OF TABLES

Table 1:	Comparison of the 1996 BRFSS Sample and Kansas 1990 Census Population Estimates .....	18
Table 2:	Demographic Description of the 1996 BRFSS Sample in Percentages .....	19
Table A:	Current Cigarette Use .....	72
Table B:	Smokeless Tobacco Use .....	72
Table C:	Overweight .....	73
Table D:	Fruit and Vegetable Consumption .....	73
Table E:	Sedentary Lifestyle .....	74
Table F:	Regular Physical Activity .....	74
Table G:	HIV/AIDS .....	75
Table H:	Diabetes Mellitus .....	75
Table I:	Breast Cancer Screening: Have Not Had a Recent Clinical Breast Exam, Women Aged 20 and Older .....	76
Table J:	Breast Cancer Screening: Have Not Had a Mammogram Within the Past 2 years, Women Aged 40 and Older .....	76
Table K:	Breast Cancer Screening: Have Not Had Both a Clinical Breast Exam and a Mammogram Within the Past 2 Years, Women Aged 40 and Older .....	77
Table L:	Cervical Cancer Screening: Have Not Had a Pap Smear Test Within the past 2 years, Women aged 18 and Older With a Uterine Cervix .....	77
Table M:	Lack Health Care Coverage .....	78
Table N:	Afraid to Leave Home at Night .....	78
Table O:	Violent Neighborhood .....	79
Table P:	Knew Abused Partner .....	79
Table Q:	Joint Symptoms .....	80
Table R:	Arthritis .....	80
Table S:	Falls, Kansans Aged 65 and Older .....	81
Table T:	Any Activity Limitation .....	81
Table U:	Personal Care Limitation, Kansans Aged 65 and Older .....	82
Table V:	Routine Care Limitation, Kansans Aged 65 and Older .....	82
Table W:	Fire Safety: Lack Working Smoke Detector .....	83
Table X:	Dental Health: Had Not Visited a Dentist or a Dental Clinic Within the Last Year .....	83
Table Y:	Dental Health: Lack Dental Coverage .....	84
Table Z:	Dental Health: Need Dental Work .....	84
Table AA:	Population Density by County .....	85

# LIST OF FIGURES

Figure 1:	Factors Contributing to Premature Death .....	14
Figure 2:	Ten Leading Causes of Death Among Kansans in 1996 .....	14
Figure 3:	Prevalence of Current Cigarette Use, By Age Group and Gender .....	21
Figure 4:	Prevalence of Current Cigarette Use, By Education Level .....	21
Figure 5:	Prevalence of Current Cigarette Use, By Household Income Level .....	21
Figure 6:	Prevalence of Current Cigarette Use, By Employment Status .....	21
Figure 7:	Prevalence of Current Cigarette Use, By Marital Status .....	21
Figure 8:	Prevalence of Current Cigarette Use, By Race or Ethnicity .....	21
Figure 9:	Length of Time Since Former Smokers Quit Smoking .....	22
Figure 10:	Prevalence of Current Cigarette Use, By State .....	22
Figure 11:	Percentage of Ever Smokers, By Age Group and Gender .....	23
Figure 12:	Percentage of Ever Smokers Who Had Quit Smoking, By Age Group and Gender .....	23
Figure 13:	Percentage of Ever Smokers, By Education Level .....	23
Figure 14:	Percentage of Ever Smokers Who Had Quit Smoking, By Education Level .....	23
Figure 15:	Percentage of Ever Smokers, By Household Income Level .....	23
Figure 16:	Percentage of Ever Smokers Who Had Quit Smoking, By Household Income Level .....	23
Figure 17:	Prevalence of Smokeless Tobacco Use Among Males, By State .....	24
Figure 18:	Percentage of Males Who Had Ever Tried Smokeless Tobacco, By Age Group .....	25
Figure 19:	Prevalence of Smokeless Tobacco Use Among Males, By Age Group .....	25
Figure 20:	Prevalence of Smokeless Tobacco Use Among Males, By Education Level .....	25
Figure 21:	Prevalence of Smokeless Tobacco Use Among Males, By Household Income Level .....	25
Figure 22:	Prevalence of Smokeless Tobacco Use Among Males, By Employment Status .....	25
Figure 23:	Prevalence of Smokeless Tobacco Use Among Males, By Population Density .....	25
Figure 24:	Overweight Prevalence, By Age Group and Gender .....	27
Figure 25:	Overweight Prevalence, By Education Level .....	27
Figure 26:	Overweight Prevalence, By Household Income Level .....	27
Figure 27:	Overweight Prevalence, By Marital Status .....	27
Figure 28:	Overweight Prevalence, By Population Density .....	27
Figure 29:	Overweight Prevalence, By State .....	27
Figure 30:	Daily Intake of Fruits and Vegetables: Less than Five Servings Per Day, By State .....	28
Figure 31:	Daily Intake of Fruits and Vegetables, By Number of Servings Per Day .....	29
Figure 32:	Percentage of Kansans Who Consumed Less Than Five Servings of Fruits and Vegetables Per Day, By Age Group and Gender .....	29
Figure 33:	Percentage of Kansans Who Consumed Less Than Five Servings of Fruits and Vegetables Per Day, By Education Level .....	29

# LIST OF FIGURES

Figure 34:	Percentage of Kansans Who Consumed Less Than Five Servings of Fruits and Vegetables Per Day, By Household Income Level .....	29
Figure 35:	Percentage of Kansans Who Consumed Less Than Five Servings of Fruits and Vegetables Per Day, By Employment Status .....	29
Figure 36:	Percentage of Kansans Who Consumed Less Than Five Servings of Fruits and Vegetables Per Day, By Population Density .....	29
Figure 37:	Prevalence of Sedentary Lifestyle, By Age Group and Gender .....	31
Figure 38:	Prevalence of Sedentary Lifestyle, By Education Level .....	31
Figure 39:	Prevalence of Sedentary Lifestyle, By Household Income Level .....	31
Figure 40:	Prevalence of Sedentary Lifestyle, By Employment Status .....	31
Figure 41:	Prevalence of Sedentary Lifestyle, By Marital Status .....	31
Figure 42:	Prevalence of Sedentary Lifestyle, By Population Density .....	31
Figure 43:	Percentage of Persons Who Engaged in No Form of Physical Activity, By State .....	32
Figure 44:	Percentage of Persons Who Engaged in Regular Physical Activity, By State .....	32
Figure 45:	Prevalence of Regular Physical Activity, By Age Group and Gender .....	33
Figure 46:	Prevalence of Regular Physical Activity, By Education Level .....	33
Figure 47:	Prevalence of Regular Physical Activity, By Household Income Level .....	33
Figure 48:	Prevalence of Regular Physical Activity, By Employment Status .....	33
Figure 49:	Prevalence of Regular Physical Activity, By Marital Status .....	33
Figure 50:	Prevalence of Regular Physical Activity, By Race or Ethnicity .....	33
Figure 51:	Percentage of Kansans Aged 18 to 64 At Risk for Contracting HIV, By Age Group and Gender .....	35
Figure 52:	Percentage of Kansans Aged 18 to 64 At Risk for Contracting HIV, By Education Level .....	35
Figure 53:	Percentage of Kansans Aged 18 to 64 At Risk for Contracting HIV, By Household Income Level .....	35
Figure 54:	Percentage of Kansans Aged 18 to 64 At Risk for Contracting HIV, By Employment Status .....	35
Figure 55:	Percentage of Kansans Aged 18 to 64 At Risk for Contracting HIV, By Marital Status .....	35
Figure 56:	Self-Reported Risk of Contracting HIV Among Kansans Aged 18 to 64 .....	35
Figure 57:	Percentage of Kansans Aged 18 to 64 Who Had Received an HIV Blood Test, By State .....	36
Figure 58:	Percentage of Kansans Aged 18 to 64 Who Had Been Tested for HIV, By Age Group and Gender .....	37
Figure 59:	Percentage of Kansans Aged 18 to 64 Who Had Been Tested for HIV, By Education Level .....	37
Figure 60:	Percentage of Kansans Aged 18 to 64 Who Had Been Tested for HIV, By Household Income Level .....	37
Figure 61:	Length of Time Since Last HIV Blood Test, Kansans Who Had Ever Had an HIV Blood Test .....	37

# LIST OF FIGURES

Figure 62:	Percentage of Kansans Aged 18 to 64 Who Thought a Properly Used Condom was Very Effective at Preventing HIV Infection Through Sexual Activity, By Age Group and Gender .....	37
Figure 63:	Percentage of Kansans Aged 18 to 64 Who Would Encourage a Sexually Active Teenager to Use a Condom, By Age Group and Gender .....	37
Figure 64:	Prevalence of Diabetes Mellitus, By Age Group .....	39
Figure 65:	Prevalence of Diabetes Mellitus, By Education Level .....	39
Figure 66:	Prevalence of Diabetes Mellitus, By Household Income Level .....	39
Figure 67:	Prevalence of Diabetes Mellitus, By State .....	39
Figure 68:	Percentage of Females Aged 20 and Older Without a Recent Clinical Breast Exam, By Age Group .....	41
Figure 69:	Percentage of Females Aged 20 and Older Without a Recent Clinical Breast Exam, By Education Level .....	41
Figure 70:	Percentage of Females Aged 20 and Older Without a Recent Clinical Breast Exam, By Household Income Level .....	41
Figure 71:	Percentage of Females Aged 20 and Older Without a Recent Clinical Breast Exam, By Population Density .....	41
Figure 72:	Percentage of Females Aged 40 and Older Without a Mammogram Within the Past Two years, By Age Group .....	41
Figure 73:	Percentage of Females Aged 40 and Older Without a Mammogram Within the Past Two years, By Education Level .....	41
Figure 74:	Percentage of Females Aged 40 and Older Who Had Ever Received a Mammogram and a Clinical Breast Exam Within the Past 2 Years, By State .....	42
Figure 75:	Percentage of Females Aged 50 and Older Who Have Received a Mammogram and a Clinical Breast Exam, By State .....	42
Figure 76:	Percentage of Females Aged 40 and Older Without a Mammogram Within the Past Two years, By Household Income Level .....	43
Figure 77:	Percentage of Females Aged 40 and Older Without a Mammogram Within the Past Two years, By Population Density .....	43
Figure 78:	Percentage of Females Aged 40 and Older Without a Mammogram and a Clinical Breast Exam Within the Past Two Years, By Age Group .....	43
Figure 79:	Percentage of Females Aged 40 and Older Without a Mammogram and a Clinical Breast Exam Within the Past Two Years, By Education Level .....	43
Figure 80:	Percentage of Females Aged 40 and Older Without a Mammogram and a Clinical Breast Exam Within the Past Two Years, By Household Income Level .....	43
Figure 81:	Percentage of Females Aged 40 and Older Without a Mammogram and a Clinical Breast Exam Within the Past Two Years, By Population Density .....	43
Figure 82:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Ever Had a Pap Smear Test, By State .....	44

# LIST OF FIGURES

Figure 83:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Not Had a Pap Smear Test Within the Past Two years, By Age Group	45
Figure 84:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Not Had a Pap Smear Test Within the Past Two years, By Education Level	45
Figure 85:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Not Had a Pap Smear Test Within the Past Two years, By Household Income Level	45
Figure 86:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Not Had a Pap Smear Test Within the Past 2 years, By Marital Status	45
Figure 87:	Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Not Had a Pap Smear Test Within the Past 2 years, By Population Density	45
Figure 88:	Percentage of Kansans Who Lacked Health Care Coverage, By Age Group and Gender	47
Figure 89:	Percentage of Kansans Who Lacked Health Care Coverage, By Education Level	47
Figure 90:	Percentage of Kansans Who Lacked Health Care Coverage, By Household Income Level	47
Figure 91:	Percentage of Kansans Who Lacked Health Care Coverage, By Employment Status	47
Figure 92:	Percentage of Kansans Who Lacked Health Care Coverage, By Marital Status	47
Figure 93:	Percentage of Kansans Unable to See a Doctor Due to the Cost Within the Past 12 Months, By Age Group and Gender	47
Figure 94:	Percentage of Kansans Unable to See a Doctor Due to the Cost Within the Past 12 Months, By Education Level	49
Figure 95:	Percentage of Kansans Unable to See a Doctor Due to the Cost Within the Past 12 Months, By Household Income Level	49
Figure 96:	Percentage of Kansans Who Had a Usual Source of Routine Health Care, By Age Group and Gender	49
Figure 97:	Percentage of Kansans Who Had a Usual Source of Routine Health Care, By Household Income Level	49
Figure 98:	Percentage of Kansans Aged 65 and Older Who Had Been Admitted to a Hospital During the Past 5 years, By Age Group	49
Figure 99:	Percentage of Kansans Who Lacked Health Care Coverage, By State	49
Figure 100:	Percentage of Kansans Who Were Afraid to Leave Their Home at Night, By Age Group and Gender	51
Figure 101:	Percentage of Kansans Who Were Afraid to Leave Their Home at Night, By Population Density	51
Figure 102:	Percentage of Kansans Who Reported That They Had Witnessed a Violent Crime in Their Neighborhood During the Past Year, By Age Group and Gender	51



# LIST OF FIGURES

Figure 103:	Percentage of Kansans Who Reported That They Had Witnessed a Violent Crime in Their Neighborhood During the Past Year, By Education Level .....	51
Figure 104:	Percentage of Kansans Who Reported That They Had Known or Seen Someone Who Had Been Physically Abused by a Spouse or Partner During the Past Year, By Age Group and Gender .....	51
Figure 105:	Percentage of Kansans Who Reported That They Had Known or Seen Someone Who Had Been Physically Abused by a Spouse or Partner During the Past Year, By Population Density .....	51
Figure 106:	Percentage of Kansans With Joint Symptoms Who Had Joint Symptoms Present for at Least One Month, By Age Group .....	52
Figure 107:	Prevalence of Joint Symptoms, By Age Group and Gender .....	53
Figure 108:	Prevalence of Joint Symptoms, By Education Level .....	53
Figure 109:	Prevalence of Joint Symptoms, By Household Income Level .....	53
Figure 110:	Prevalence of Joint Symptoms, By Population Density .....	53
Figure 111:	Percentage of Kansans With Joint Symptoms Who Had Joint Symptoms For at Least One Month, By Education Level .....	53
Figure 112:	Percentage of Kansans With Joint Symptoms Who Had Joint Symptoms For at Least One Month, By Household Income Level .....	53
Figure 113:	Percentage of Kansans With Joint Symptoms Who Were Limited in Any Activity Due to Joint Symptoms, By Age Group .....	54
Figure 114:	Type of Arthritis Kansans Report Their Doctor Told Them They Had .....	54
Figure 115:	Percentage of Kansans With Joint Symptoms Who Were Limited in Any Activity Due to Joint Symptoms, By Education Level .....	55
Figure 116:	Percentage of Kansans With Joint Symptoms Who Were Limited in Any Activity Due to Joint Symptoms, By Household Income Level .....	55
Figure 117:	Prevalence of Arthritis, By Age Group and Gender .....	55
Figure 118:	Prevalence of Arthritis, By Education Level .....	55
Figure 119:	Prevalence of Arthritis, By Household Income Level .....	55
Figure 120:	Prevalence of Arthritis, By Population Density .....	55
Figure 121:	Percentage of Kansans Aged 65 and Older Who Had Fallen During the Past 12 Months, By Age Group .....	57
Figure 122:	Percentage of Kansans Aged 65 and Older Who Had Fallen During the Past 12 Months, By Household Income Level .....	57
Figure 123:	Percentage of Kansans Aged 65 and Older Who Had Fallen During the Past 12 Months, By Health Risk or Condition .....	57
Figure 124:	Prevalence of Any Activity Limitation Due to Any Impairment or Health Problem, By Age Group and Gender .....	59
Figure 125:	Prevalence of Any Activity Limitation Due to Any Impairment or Health Problem, By Education Level .....	59
Figure 126:	Prevalence of Any Activity Limitation Due to Any Impairment or Health Problem, By Household Income Level .....	59
Figure 127:	Prevalence of Routine Care and Personal Care Limitations Among Kansans Aged 65 and Older, By Age Group .....	59

# LIST OF FIGURES

Figure 128:	Prevalence of Routine Care and Personal Care Limitations Among Kansans Aged 65 and Older, By Education Level . . . . .	59
Figure 129:	Prevalence of Routine Care and Personal Care Limitations Among Kansans Aged 65 and Older, By Household Income Level . . . . .	59
Figure 130:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Age Group and Gender . . . . .	61
Figure 131:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Education Level . . . . .	61
Figure 132:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Household Income Level . . . . .	61
Figure 133:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Employment Status . . . . .	61
Figure 134:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Marital Status . . . . .	61
Figure 135:	Percentage of Kansans Who Lacked a Working Smoke Detector, By Population Density . . . . .	61
Figure 136:	Percentage of Kansans Who Had Not Had Any Teeth Removed Due to Tooth Decay or Gum Disease, By Age Group . . . . .	62
Figure 137:	Percentage of Kansans Who Had Not Visited a Dentist or a Dental Clinic Within the Last Year, By Age Group and Gender . . . . .	63
Figure 138:	Percentage of Kansans Who Had Not Visited a Dentist or a Dental Clinic Within the Last Year, By Education Level . . . . .	63
Figure 139:	Percentage of Kansans Who Had Not Visited a Dentist or a Dental Clinic Within the Last Year, By Household Income Level . . . . .	63
Figure 140:	Percentage of Kansans Who Had Not Visited a Dentist or a Dental Clinic Within the Last Year, By Population Density . . . . .	63
Figure 141:	Percentage of Kansans Who Need Dental Work, By Age Group and Gender . . .	63
Figure 142:	Percentage of Kansans Who Need Dental Work, By Education Level . . . . .	63
Figure 143:	Percentage of Persons Who Had Visited a Dentist or Dental Clinic Within the Past Year, By State . . . . .	64
Figure 144:	Percentage of Kansans Who Need Dental Work, By Household Income Level .	65
Figure 145:	Percentage of Kansans Who Need Dental Work, By Marital Status . . . . .	65
Figure 146:	Percentage of Kansans Who Lacked Dental Coverage, By Age Group and Gender . . . . .	65
Figure 147:	Percentage of Kansans Who Lacked Dental Coverage, By Education Level . . .	65
Figure 148:	Percentage of Kansans Who Lacked Dental Coverage, By Household Income Level . . . . .	65
Figure 149:	Percentage of Kansans Who Lacked Dental Coverage, By Population Density . . . . .	65
Figure 150:	Percentage of Kansans Who Had Ever Been Counseled About Their Diet and Eating Habits By a Doctor or Health Professional, By Age Group and Gender . . . . .	67
Figure 151:	Percentage of Kansans Who Had Ever Been Counseled About Physical Activity or Exercise By a Doctor or Health Professional, By Age Group and Gender . . . . .	67

## LIST OF FIGURES

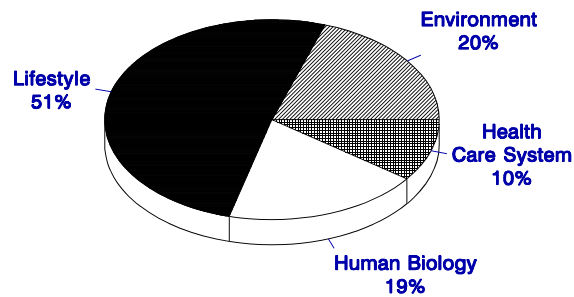
Figure 152: Percentage of Kansans Who Had Ever Been Counseled About Alcohol Use By a Doctor or Health Professional, By Age Group and Gender . . . . .	67
Figure 153: Percentage of Kansans Who Had Ever Been Counseled About Injury Prevention By a Doctor or Health Professional, By Age Group and Gender . . . .	67
Figure 154: Percentage of Kansans Who Had Ever Been Counseled About Drug Abuse By a Doctor or Health Professional, By Age Group and Gender . . . . .	67
Figure 155: Percentage of Kansans Who Had Ever Been Counseled About Their Sexual Practices By a Doctor or Health Professional, By Age Group and Gender . . . . .	67

# INTRODUCTION

Every year thousands of Kansans die prematurely or suffer disability from chronic diseases (e.g. heart disease, cancer, diabetes) and unintentional injuries. A substantial portion of the mortality and morbidity caused by chronic disease and unintentional injury could be prevented through lifestyle modifications and proper use of preventive health services. Lifestyle behaviors which contribute to chronic diseases include cigarette smoking, physical inactivity, poor eating habits, alcohol misuse, and underutilization of preventive health services. Preventive health services which are underutilized include immunizations, routine check-ups, and breast and cervical cancer screenings. It has been estimated that over half of the factors leading to premature death are lifestyle-related (Fig. 1).

**Figure 1**

## Factors Contributing to Premature Death (Before Age 75)

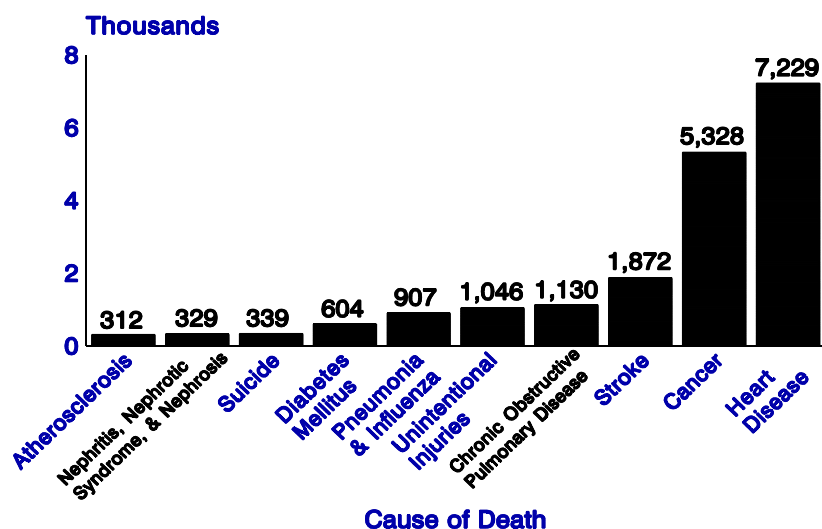


Source: Centers for Disease Control, 1990

To effectively lower the rate of premature mortality and morbidity, public health leaders need reliable data to formulate intervention strategies, justify resources to support these strategies, evaluate the impact of interventions and programs, and propose new policies or legislation. The Kansas Behavioral Risk Factor Surveillance System (BRFSS) is designed to provide such data. To do so, it assesses and monitors behavioral health risk trends over time by collecting data on behaviors, knowledge, and attitudes that contribute to the leading causes of death (Fig. 2).

**Figure 2**

## Ten Leading Causes of Death Among Kansans in 1996



Kansas Vital Statistics, 1996

# METHODOLOGY

## BACKGROUND

The Behavioral Risk Factor Surveillance System (BRFSS) is a national data collection system, coordinated by the Centers for Disease Control and Prevention, designed to enable public health professionals to assess health risk behaviors known to contribute to or increase the risk of chronic disease, acute illness, injury, disability, and premature death. The Kansas Behavioral Risk Factor Surveillance System (BRFSS) established baseline prevalence estimates for chronic disease and injury risk factors in 1990. Baseline estimates were provided through a random-digit-dialed telephone survey of 820 adult participants in the fall of 1990. The Kansas BRFSS has been conducted monthly since January, 1992. Data were collected monthly to account for potential seasonal variations in health risk behaviors. This report represents results solely from the 2,008 surveys completed during the 1996 calendar year.

## SAMPLING

The telephone survey was conducted using a simple random digit sampling method in which all people over the age of 18, living in a household with a telephone, have an equal chance of selection. Area codes and prefix listings were obtained through the Southwestern Bell Corporation. Using this six digit number (area code and prefix) the BRFSS unit, within the Bureau for Disease Prevention and Health Promotion, generated a random sample of all possible telephone exchanges in Kansas. The six digits were then assigned all possible four digit suffixes, from which a randomly selected sample was obtained for use in the survey. Pre-screening of the sample at the state level was conducted to eliminate businesses, institutions, and nonworking exchanges.

## DATA COLLECTION

Kansas residents were interviewed by telephone using a standardized questionnaire developed and field tested by the CDC. The questionnaire consisted of three parts: core survey questions, CDC optional modules, and state added questions. The core questions pertained to weight and height, cigarette use, women's health issues, AIDS/HIV, diabetes, health care access, physical activity, fruit and vegetable consumption, and demographic variables. CDC optional modules pertained to smokeless tobacco use, oral health, arthritis, preventive counseling, and health care utilization. State-added questions were related to fire safety, activity limitation, falls, and violence and crime.

Interviewing took place during two weeks of each month throughout 1996. Potential working telephone numbers were dialed during three separate calling periods (daytime, evening, and weekends) for a total of 15 call attempts before being replaced. Upon reaching a valid residential number, one household member aged 18 or older was randomly selected using the Kish respondent selection procedure<sup>1</sup>. This selection process cross-referenced the last digit in the telephone number with the number of adults in the household to eliminate potential over sampling and bias in the sample. If the selected respondent was not available, an appointment was made to call at a later date. If the selected respondent could not be reached during the survey calling period or refused to participate on three separate occasions, that telephone number was replaced with another randomly selected number.

## **WEIGHTING PROCEDURE**

The weighting process for survey data was conducted by the CDC, Office of Surveillance and Analysis. Applying weights to the data set made possible applicable projections of the sample to the general population of Kansas. The responses of each person interviewed were assigned a weight which accounted for the number of telephone numbers in the household, the number of adults in the household, and the demographic distribution of the sample. By weighing the data, the responses were adjusted to compensate for the over-representation or under-representation of particular subgroups. The percentages in this report represent an assessment of the behavioral risk factors for the general population and subgroups of the population of Kansas using weighted data.

## **DATA ANALYSIS**

Data and statistical analyses presented in this report were performed by the CDC, Office of Surveillance and Analysis except where indicated. For data quality, the true population prevalence was evaluated at the 95% confidence interval. The 95% confidence interval ensures that if the sample were repeated, the same responses would be given 95% of the time. The charts and tables of the various risk factors presented in this document are broken down by age, gender, race, education level, income level, employment status, marital status, and population density.

In the calculation of the percentage of the population at risk for specific health behaviors, respondents who indicated "don't know" or "refused" were not included. This will account for varied sample sizes from question to question. For demographic variables the population at risk is not calculated for unknown/refused in the tables in the appendix. When the results are generalized to the population, an assumption was made that the proportion of respondents at risk was the same for those with missing or unknown information as for those who provided adequate information. One exception to this is the income category in which 13% of the sample responded "don't know" or "refused." Since this represents a substantial proportion of respondents, this response is included in the tables that break down the income category.

## **DATA RELIABILITY**

Telephone interviewing has been demonstrated to be a reliable method for collecting behavioral risk data and can cost three to four times less than other interviewing methods such as mail-in interviews or face-to-face interviews. The United States Bureau of Census indicates that only 4% of the households in Kansas do not have a telephone at any given time. Prevalence projections made in this report assume that the 4% of Kansans that do not have a telephone will have the same risk prevalence as the 96% of Kansans that do have a telephone; however, since telephone ownership is largely dependent on income, the survey may underestimate the prevalence of some risk categories, such as lack of health insurance.

The BRFSS methodology has been utilized and evaluated by the CDC and other participating states since 1984. Content of survey questions, questionnaire design, data collection procedures, surveying techniques, and editing procedures have been thoroughly evaluated to maintain overall data quality and to lessen the potential for bias within the population sample.

## INTERPRETATION OF RESULTS

Data for each behavioral risk factor were broken down demographically by age group, gender, race, education, household income, employment, marital status, and population density. The complete demographic breakdown for each risk factor can be found in the appendices. The age group, race, and gender categories of surveyed Kansans are shown in Table 1. The other demographic categories are shown in Table 2. The race categories include white, non-Hispanic, black non-Hispanic, Hispanic, and other (including Asian and Native American). The education categories are comprised of those with less than a high school diploma, high school graduate, some college (i.e. technical or vocational school and partial college education with less than a four year degree), and college graduate (those who have a 4 year college degree and/or a postgraduate degree). Annual household income categories are \$0-\$9,999, \$10,000-\$19,999, \$20,000-\$34,999, \$35,000-\$49,999, \$50,000+, and unknown/refused.

The employment status category is comprised of people who are employed for wages, self-employed, retired, and those who are not employed (those out of work, homemakers, students, and those unable to work). Marital status is comprised of married, divorced or separated, widowed, and never married or unmarried couple. Population density is broken down by counties which have 150 or more persons per square mile (urban), counties with 20-149 persons per square mile (mixed urban and rural), and counties with fewer than 20 persons per square mile (rural), according to the 1990 U.S census<sup>2</sup>. Population density is figured by taking the number of inhabitants in the area divided by the number of square miles in the area. A list of Kansas counties according to population density is provided in the appendices.

The demographic characteristics for the 1996 representative sample of 2,008 participants are presented in Tables 1 and 2. The comparison of weighted versus unweighted data demonstrates how the sample differs when the data is weighted. Use of the weighting procedure provides a more reliable representation of the actual population of the state. Therefore, all results presented in this report were calculated using the weighted data. Sample size and demographic variable cell size for each risk factor are reported in the appendices.

Table 1 presents the unweighted and weighted sample proportions by age and gender, along with the 1990 census population estimates. A comparison of unweighted and weighted sample proportions show that in the unweighted data, those aged 18 to 24 or 45 to 54 are under-represented and those aged 25-44 were over-represented. Within sample proportions by gender, males were slightly under-represented while females were slightly over-represented in the unweighted sample.

Table 2 presents an additional demographic description of the 1996 BRFSS data. The unweighted and weighted percentages for education, income, employment status, marital status, and population density were very similar. In the marital breakdown, the unweighted sample under-represented those who were married and over-represented those who were widowed and those who were divorced or separated.

Each of the remaining chapters of this document presents the results for one of eighteen health risk behaviors. Included in each chapter is a background section about the profiled health risk behavior, a section on the estimated prevalence of the profiled risk behavior within the Kansas population and within certain subpopulations of interest (e.g. age group, income level, education level), and a section comparing Kansas with the rest of the United States.

The survey data reported in this document are most precise if reported for the entire survey population. If specific subgroup population data are to be used, reference should be made to the appendices to evaluate the sample size of the specific subgroup.

**TABLE 1**

Comparison of the 1996 BRFSS Sample (Weighted and Unweighted) and Kansas 1990 Census Populations Estimates by Age Group and Gender

Demographic Characteristics	Unweighted Sample (%)	Weighted Sample (%)	Intercensal Population Estimates (%)
<b>Age Group</b>			
18-24	8.2	12.5	14.1
25-34	18.9	20.0	22.7
35-44	25.1	21.4	19.8
45-54	15.7	15.4	12.9
55-64	9.1	10.9	11.5
65 & Over	22.6	19.6	18.9
Unknown/Refused	0.4	0.3	*
<b>Race</b>			
White, Non-Hispanic	88.9	88.7	88.4
Black, Non-Hispanic	4.7	4.3	5.7
Hispanic	5.0	5.3	3.8
Other	1.3	1.5	2.1
Refused	0.1	0.2	*
<b>Gender</b>			
Male	42.8	48.2	48.2
Female	57.2	51.8	51.8

(\*) Indicates that unknown/refused does not apply to intercensal estimates.

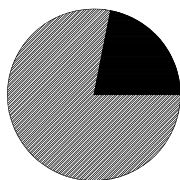


**TABLE 2**

Demographic Description of the 1996 BRFSS Sample in Percent

Demographic Characteristics	Unweighted Sample	Weighted Sample
Education		
< High School Grad.	10.2	9.9
High School Graduate	33.9	34.5
Some College	29.9	29.8
College Graduate	25.8	25.7
Unknown/Refused	0.2	0.2
Household Income		
\$0-\$9,999	4.0	3.4
\$10,000-\$19,999	13.7	12.3
\$20,000-\$34,999	31.2	30.5
\$35,000-\$49,999	22.1	22.5
\$50,000+	15.9	18.1
Unknown/Refused	13.0	13.2
Employment Status		
Employed for Wages	60.2	61.2
Self-Employed	7.8	8.1
Not Employed for Wages	9.2	10.5
Retired	22.7	19.9
Unknown/Refused	0.1	0.3
Marital Status		
Married	56.5	64.2
Divorced/Separated	14.0	9.3
Widowed	13.2	8.6
Never Married/Unmarried Couple	15.6	17.4
Unknown/Refused	0.6	0.4
Population Density		
Urban	42.9	42.5
Rural	19.2	19.0
Mixed Urban and Rural	37.2	37.8
Unknown/Refused	0.6	0.7

**Cigarette Use  
At Risk 22%**



**Ever Cigarette Smokers:** Respondents who reported they had smoked at least 100 cigarettes in their lifetime.

**Current Cigarette Smokers:** Respondents who reported they had smoked at least 100 cigarettes in their lifetime and were current smokers.

**Former Cigarette Smokers:** Respondents who reported they had smoked at least 100 cigarettes in their lifetime but did not smoke now.

## Cigarette Use

### Background

Cigarette smoking is the single most preventable cause of premature death and disability in Kansas. Cigarette use is responsible for nearly one in five deaths in Kansas and smokers lose an average of 15 years of life<sup>3</sup>. Smokers have twice the risk of death as persons who have never smoked<sup>4</sup>. Smoking is associated with cancers of the lung, mouth, pharynx, larynx, esophagus, pancreas, uterine cervix, kidney, and bladder. It is responsible for 30% of all cancer deaths and 87% of lung cancer deaths<sup>3</sup>. Smoking is a major cause of cardiovascular diseases and lung diseases such as emphysema, pneumonia, and bronchitis. Women who smoke during pregnancy are more likely to have children who suffer complications such as low birthweight and sudden infant death syndrome (SIDS)<sup>5</sup>. Environmental tobacco smoke (ETS) or secondhand smoke, a combination of smoke from a burning cigarette and smoke exhaled by the smoker, is known to cause respiratory illnesses and infections, and contributes to heart disease and lung cancer<sup>3</sup>. It has been recommended by the National Institute for Occupational Safety and Health that exposure to ETS in the work place be reduced to the lowest feasible concentration by eliminating smoking in the work place or designating separately ventilated smoking areas.

Among persons who smoke the health benefits of cessation would be substantial. At every age, people who quit smoking live longer than those who continue smoking<sup>3</sup>. Smokers who quit before they are 50 years old have only half the risk of dying during the next 15 years as those persons who continue smoking<sup>3</sup>. Smoking cessation substantially decreases the risk of lung, laryngeal, esophageal, oral, pancreatic, bladder, and cervical cancers, as well reducing the risk of developing coronary heart disease and cardiovascular disease<sup>3</sup>.

### Who's At Risk Among Kansans

Over a fifth (22%) of respondents reported current cigarette use. Males more frequently reported being current cigarette smokers (26%) than females (18%). The percentage of Kansans who smoked cigarettes increased with advancing age until age 55 at which point it began to decline. Cigarette Smoking decreased with rising household income and higher levels of education. Kansans who were self-employed, divorced, or separated reported higher rates of cigarette use.

### Characteristics of Current Smokers

Over four-fifths (84%) of current cigarette smokers reported that they had smoked every day during the past thirty days. Among current smokers who smoked every day, the average

Figure 3

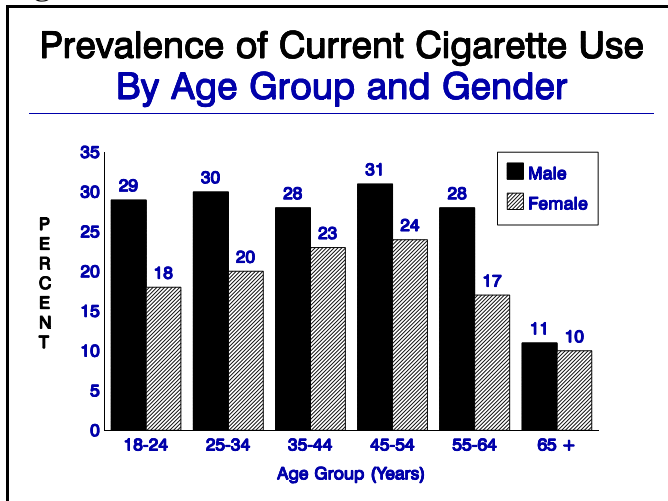


Figure 5

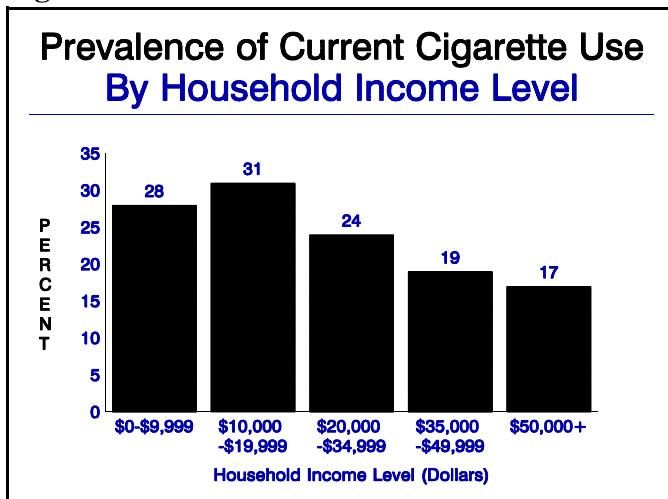


Figure 7

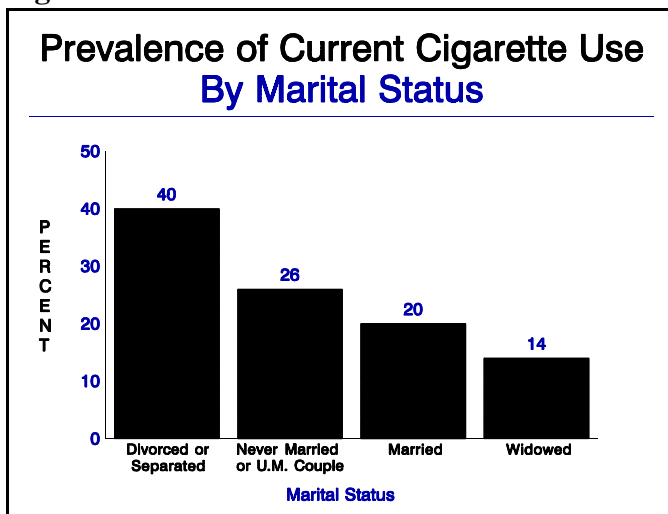


Figure 4

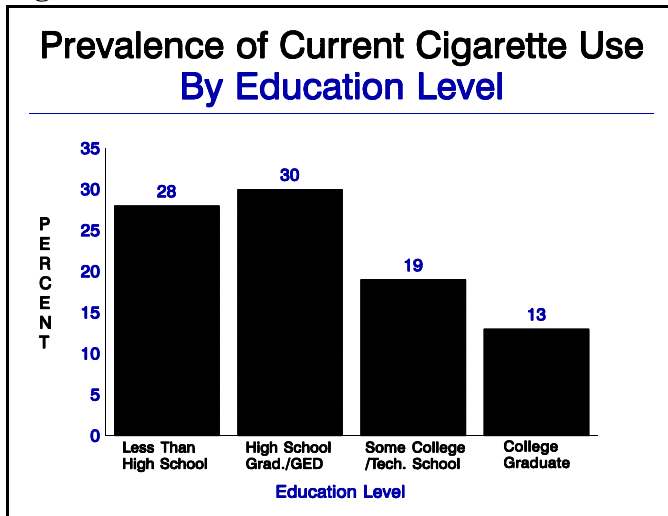


Figure 6

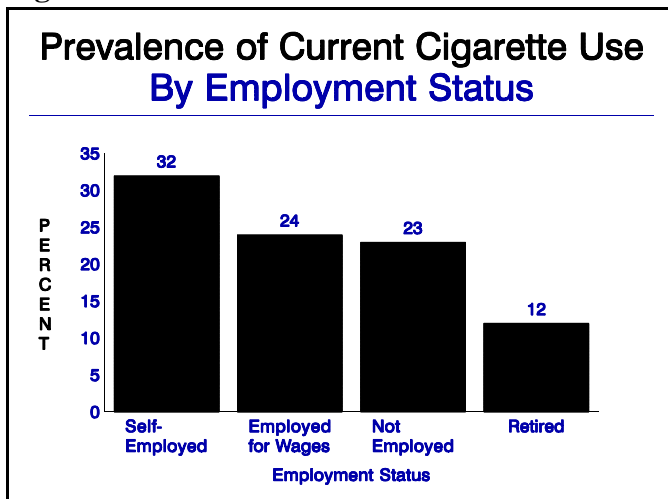
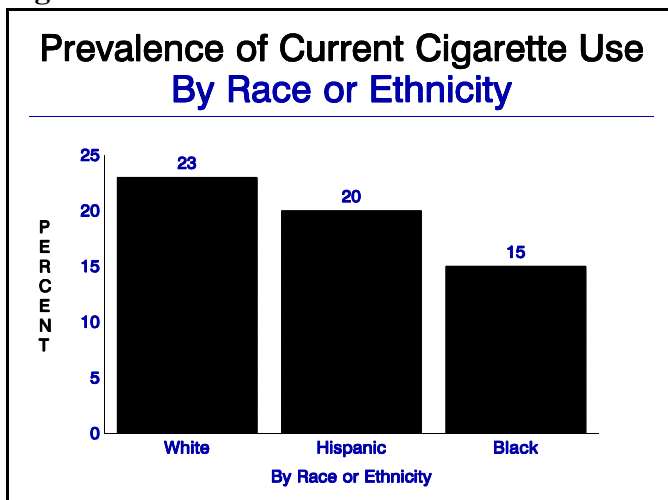


Figure 8



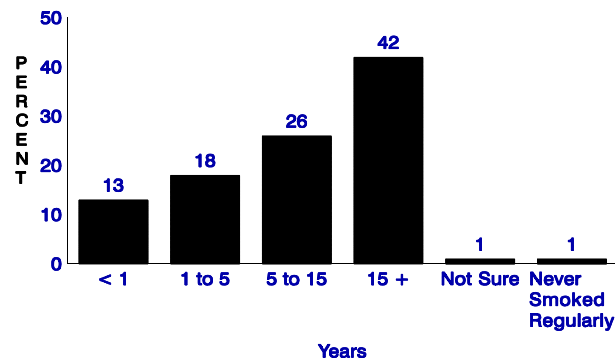
number of cigarettes smoked each day was 20.1 and the average annual expenditure on cigarettes was \$641.94\*. Among current smokers who smoked every day, 39% indicated that they had quit smoking for at least one day during the past twelve months.

### Characteristics of Former Smokers

Nearly half (47%) of all Kansans who had ever smoked cigarettes had quit smoking cigarettes. Among former smokers, 13% reported that they had quit smoking within the past year, 18% had quit smoking 1 to 5 years ago, 26% had quit 5 to 15 years ago, 42% had quit smoking 15 or more years ago, 1% had never smoked regularly, and 1% were unsure of how long it had been since they had quit smoking. Ever smokers with higher levels of education and household income were more likely to have quit successfully. The percentage of ever smokers who had successfully quit also increased with advancing age; however, this may be attributable, in part, to both the higher death rate affecting ever smokers who continue to smoke and to the increased number of smokers who successfully quit smoking over time.

Figure 9

#### Length of Time Since Former Smokers Quit Smoking



### Kansas and the United States

In 1996, Kentucky reported the highest prevalence of current cigarette use (32%) and Utah reported the lowest prevalence of current cigarette use (16%). Kansas reported the twelfth lowest prevalence of current cigarette use. The median prevalence of current cigarette use in the United States was 24% during 1996.

Figure 10

#### Prevalence of Current Cigarette Use By State

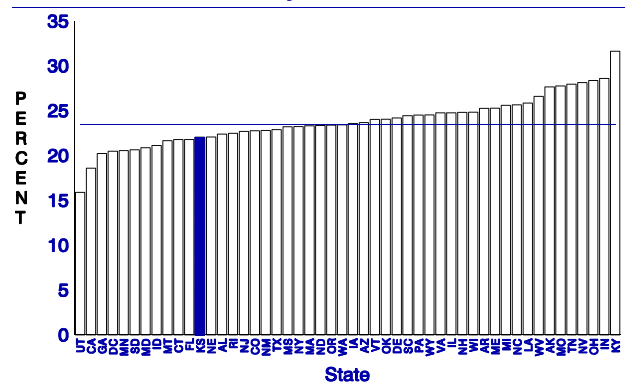


Figure 11

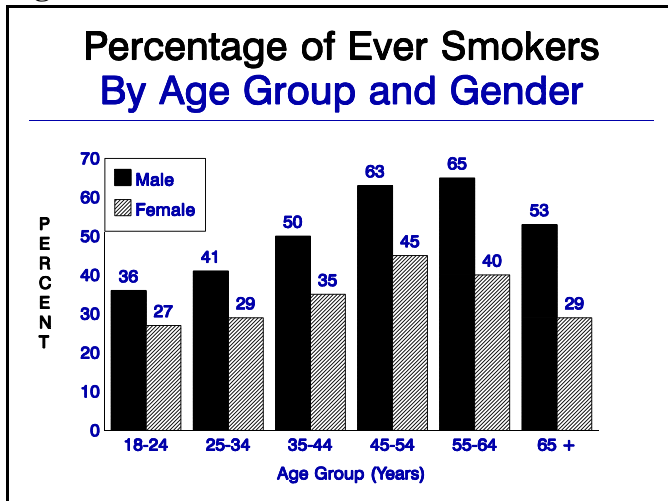


Figure 13

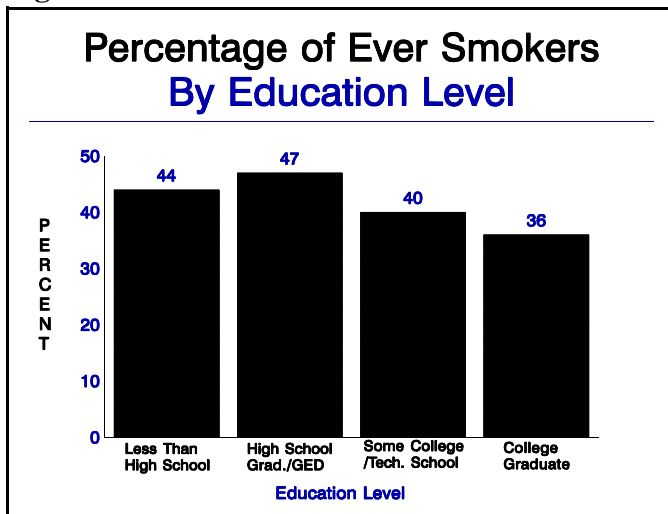


Figure 15

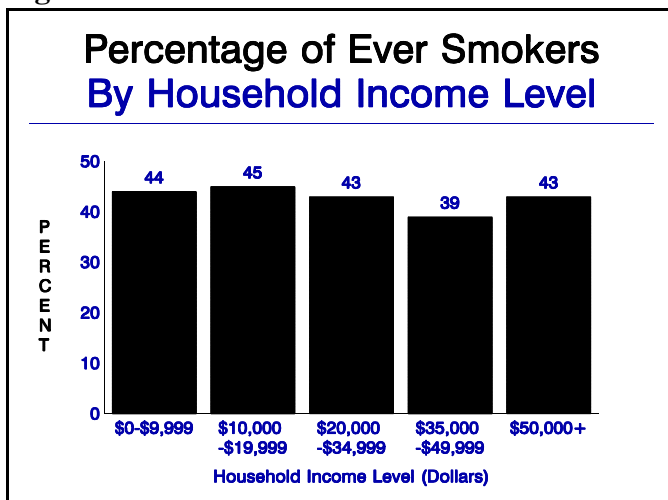


Figure 12

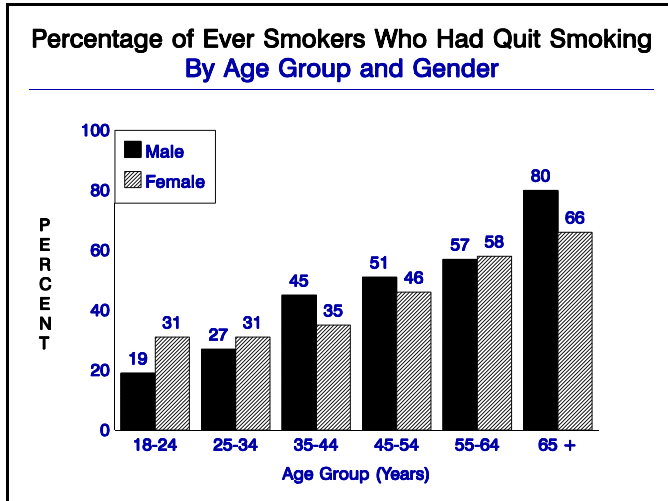


Figure 14

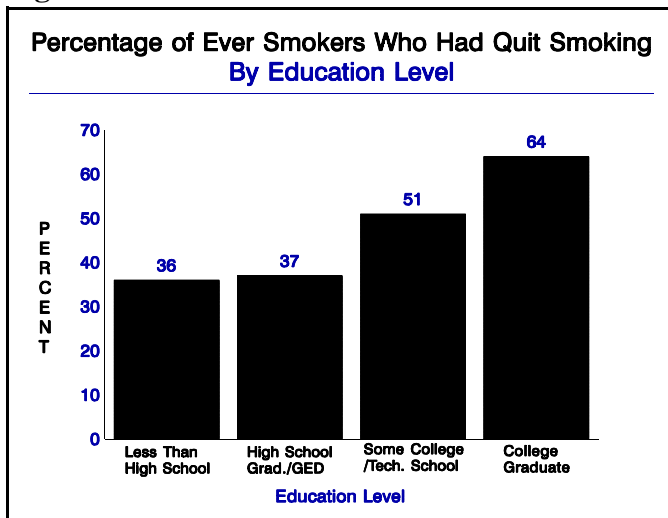
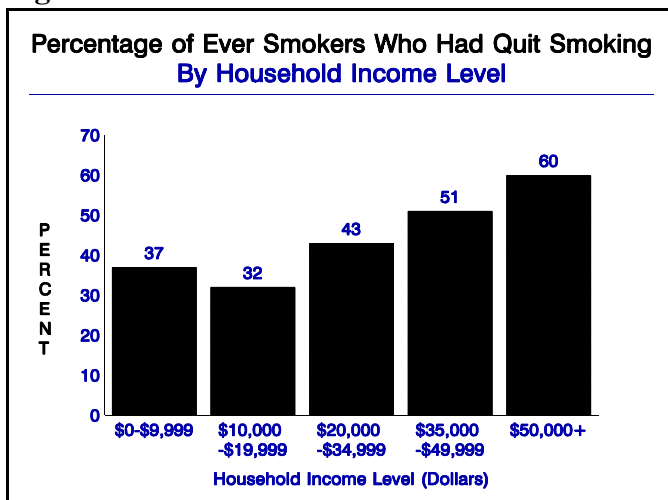
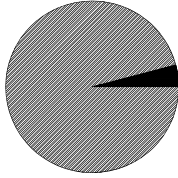


Figure 16



**Smokeless Tobacco  
At Risk 4%**



**Smokeless Tobacco User:** *Persons who reported that they currently used smokeless tobacco products such as chewing tobacco and snuff.*

## Smokeless Tobacco Use

### Background

Smokeless tobacco use is often believed to be a less addictive, safer way of using tobacco; however, smokeless tobacco users absorb up to twice the nicotine (the substance in tobacco which makes it addictive) that cigarette users do<sup>6</sup>. Smokeless tobacco poses substantial health risks. Oral cancer occurs several times more frequently among oral tobacco users than among non-users. Excess risk of cancer of the cheek and gum is 50 times more common among long-term oral tobacco users compared to non-users<sup>6</sup>. Smokeless tobacco use has been linked to cancers of the gum, mouth, pharynx, larynx, and esophagus, and to gum diseases such as gingivitis. It may also play a role in cardiovascular disease and stroke through increases in blood pressure, vasoconstriction, and irregular heart beat<sup>6</sup>.

### Who's At Risk Among Kansans

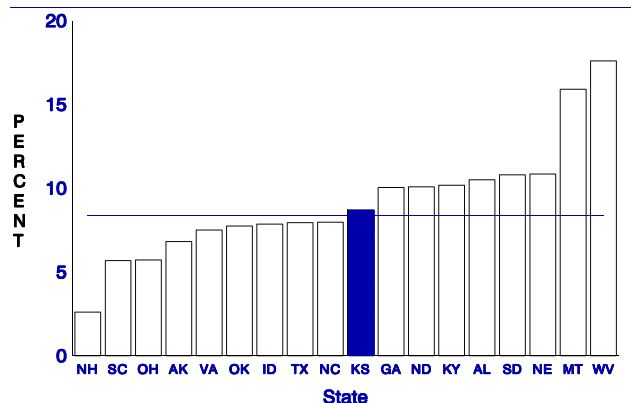
During 1996, 29% of males (2% of females) reported that they had ever used or tried smokeless tobacco products, and 9% of males (0.1% of females) reported current smokeless tobacco use. Among Kansans who had ever tried or used smokeless tobacco products, 28% reported that they were currently using smokeless tobacco products. Among males smokeless tobacco use decreased with advancing age. Males who were self-employed, were never married or a member of an unmarried couple, males with a high school education or some college, and males with household incomes of \$20,000 to \$34,999 more frequently reported current smokeless tobacco use.

### Kansas and the United States

Eighteen states asked questions regarding smokeless tobacco use in 1996. New Hampshire had the lowest rate of smokeless tobacco use among males (3%) and West Virginia reported the highest rate of smokeless tobacco use (18%). Kansas had the ninth highest rate among the 18 states. The median rate of smokeless tobacco use among the 18 states was 8% in 1996.

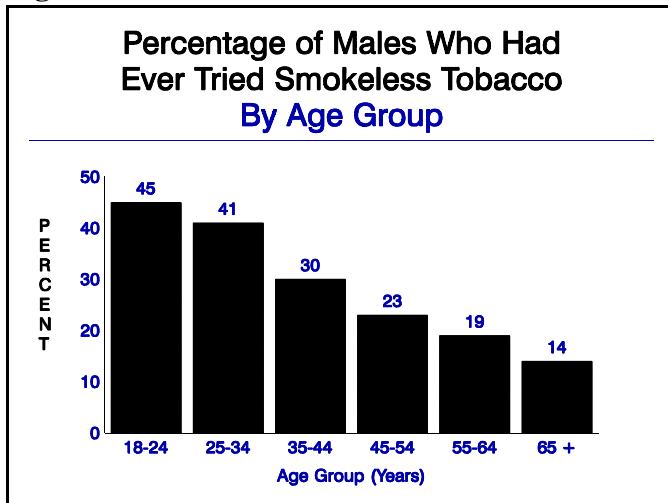
**Figure 17**

**Prevalence of Smokeless Tobacco Use Among Males  
By State**

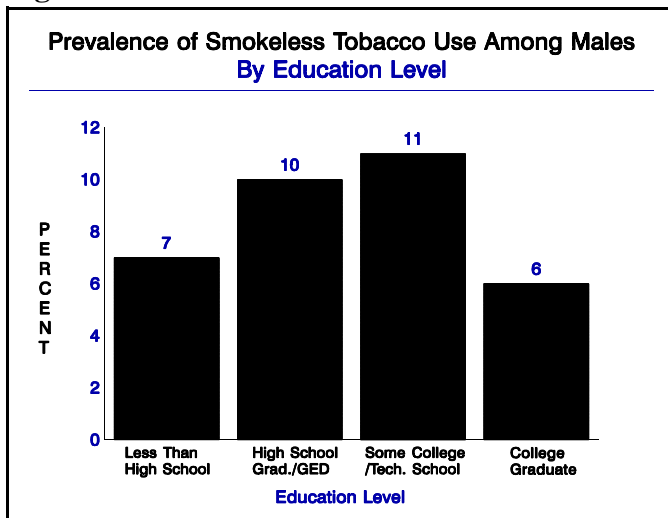




**Figure 18**



**Figure 20**



**Figure 22**

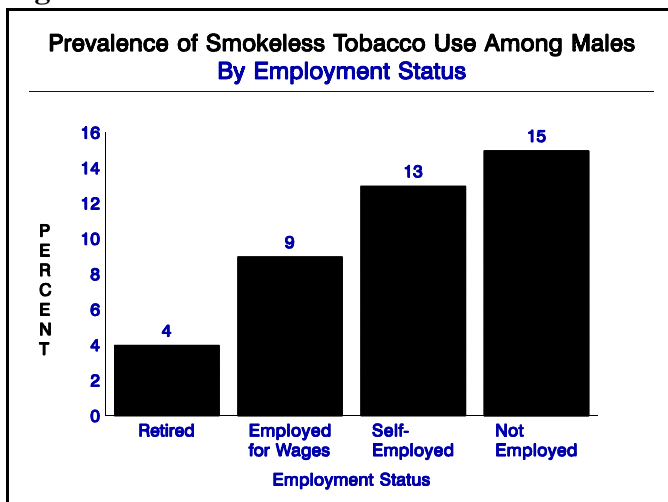


Figure 19

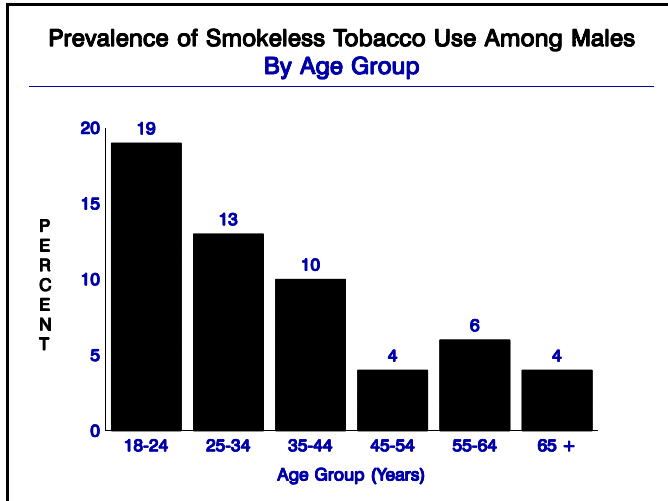


Figure 21

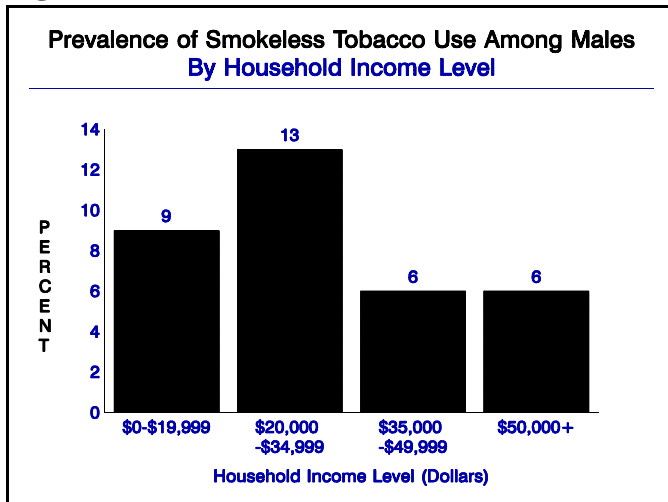
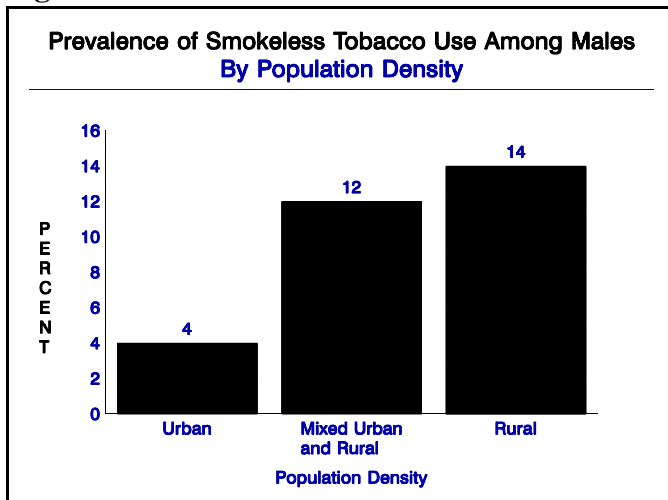
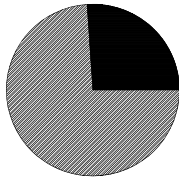


Figure 23



**Overweight  
At Risk 26%**



**Overweight:** Based on Body Mass Index (BMI). BMI is defined as weight in kilograms divided by height in meters squared ( $\text{kg}/\text{m}^2$ ). Males who had a BMI of  $\geq 27.8$  and females who had a BMI  $\geq 27.3$  were considered overweight.

## Overweight

### Background

There is an increased risk for general excess mortality associated with being overweight and the risk for excess mortality increases with higher body mass indexes<sup>7</sup>. Being overweight is associated with elevated blood cholesterol, high blood pressure, noninsulin-dependent diabetes mellitus, and increased risk of developing coronary heart disease<sup>8</sup>. Being overweight also increases a person's risk of developing gall bladder disease, degenerative joint disease, and some types of cancer<sup>8</sup>. Health experts recommend a well-balanced, low-fat, high fiber diet in conjunction with regular physical exercise to help achieve or maintain normal body weight.

### Who's At Risk Among Kansans

According to self-reported height and weight, 26% of survey respondents were overweight based on body mass index. Males and females were equally likely to report being overweight (26%). The proportion of Kansans who were overweight increased with advancing age until age 65 at which point it began to decrease. Being overweight also decreased with greater educational attainment. Kansans who had household incomes below \$20,000, Kansans who were married, Kansans living in rural counties, and African-American Kansans more frequently reported being overweight.

### Characteristics of Overweight Kansans

Among Kansans who were overweight, 84% of had seen a doctor for a routine check-up during the past two years; yet only 19% of overweight Kansans who had received a routine check-up during the last two years had been advised by a health professional to lose weight. Fifty-three percent of overweight Kansans indicated they were trying to lose weight; and another 22% were trying to keep from gaining weight. Among overweight Kansans who were trying to lose or keep from gaining weight, 84% were eating fewer calories and/or less fat, 55% were exercising, and 49% were exercising and watching their diet to lose or keep from gaining weight. Among overweight Kansans who were watching their diet to lose weight, 6% were eating fewer calories, 52% were eating less fat, and 42% were eating both fewer calories and less fat.

### Kansas and the United States

In the United States during 1996, Colorado had the lowest percentage of overweight persons (22%) while South Carolina reported the highest percentage of overweight persons (35%). Kansas reported the fifth lowest percentage of overweight persons. The median percentage of overweight persons in the United States was 29% in 1996.

Figure 24

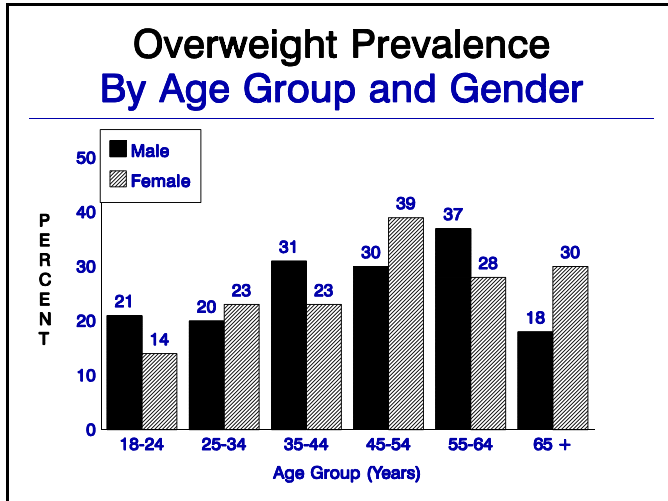


Figure 26

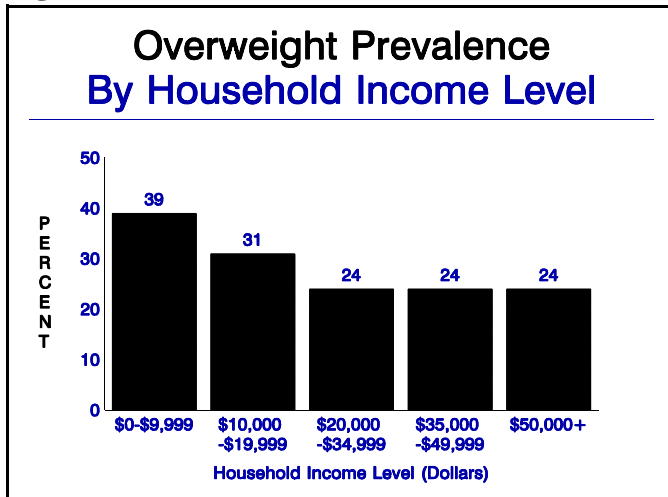


Figure 28

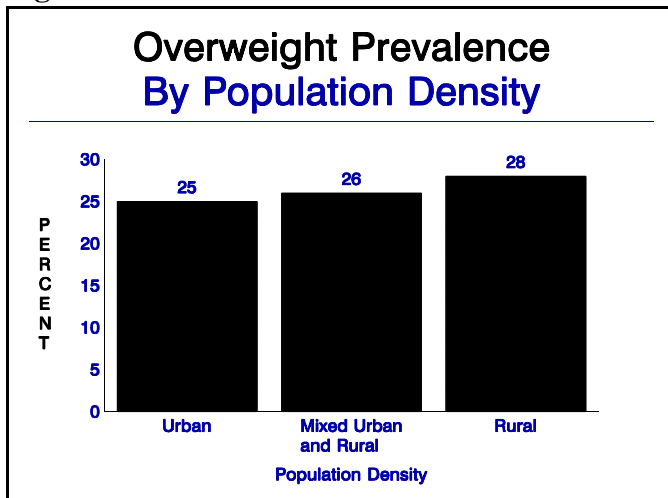


Figure 25

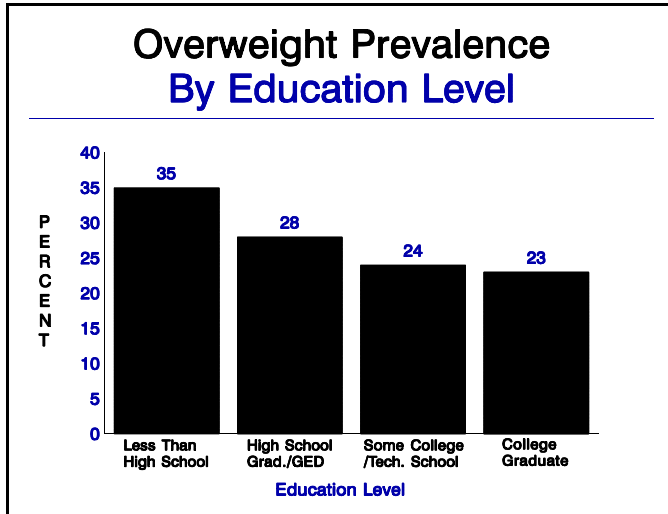


Figure 27

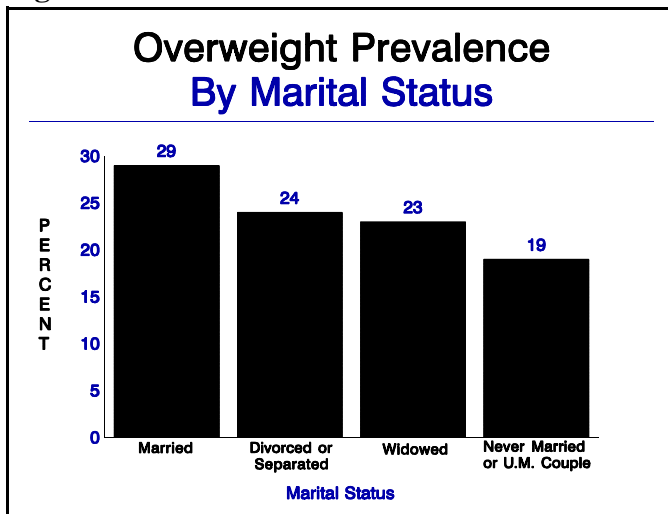
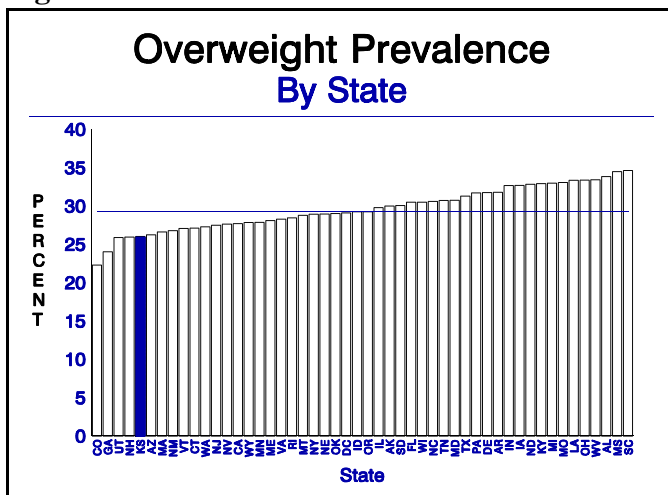
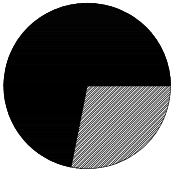


Figure 29



Inadequate Fruit and  
Vegetables Consumption  
At Risk 72%



**Inadequate Fruit and Vegetable Consumption:** *Persons who reported consuming less than 5 servings of fruits and vegetables a day.*

## Fruit and Vegetable Consumption

### Background

Proper nutrition is important for maintaining good health. Dietary factors play a major role in the development of at least 5 of the 10 leading causes of death (heart disease, stroke, noninsulin-dependent diabetes mellitus, atherosclerosis, and some types of cancer)<sup>8</sup>. Fruits and vegetables play an essential role in maintaining good health. Fruits and vegetables are high in complex carbohydrates, fiber, minerals, and vitamins, and are generally low in fat content. Populations consuming diets rich in these foods have substantially lower rates of cancers of the colon, breast, lung, mouth, throat, stomach, bladder, cervix, and pancreas<sup>9</sup>. It is recommended that each person should eat a minimum of five servings of fruits and vegetables each day.

### Who's At Risk Among Kansans

Based on self-reported data, 28% of Kansans consumed the recommended five or more servings of fruits and vegetables each day, 39% reported consuming at least three but less than five servings per day, 29% consumed one but less than three servings per day, and 4% consumed less than one serving daily. Males (70%) and females (73%) reported similar proportions of persons consuming five servings of fruits and vegetables each day. The proportion of Kansans who consumed less than five servings of fruits and vegetables each day decreased with advancing age, rising household income, and greater educational attainment. Kansans who were employed for wages, never married or member of an unmarried couple, divorced or separated, or of African-American ethnicity more frequently reported consuming less than five servings of fruits and vegetables a day.

Figure 30

### Kansas and the United States

In 1996, Arkansas had the lowest proportion of persons who reported consuming less than five servings of fruits and vegetables each day (66%), while Ohio reported the highest proportion who consumed five or more servings of fruits and vegetables (86%). Kansas reported the 6th lowest percentage of persons who consumed less than five servings of fruits and vegetables each day. The median proportion of persons who consumed less than five servings of fruits and vegetables daily in the United States was 24%.

**Daily Intake of Fruits and Vegetables:  
Less than Five Servings Per Day  
By State**

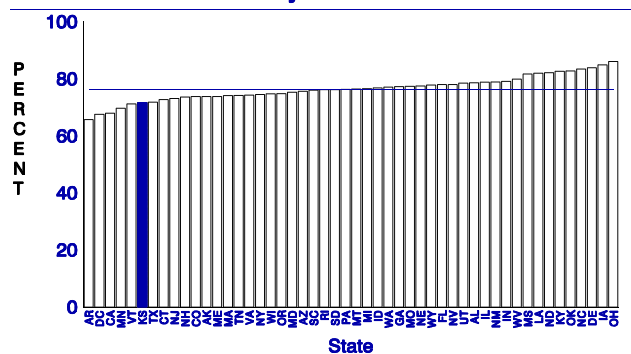


Figure 31

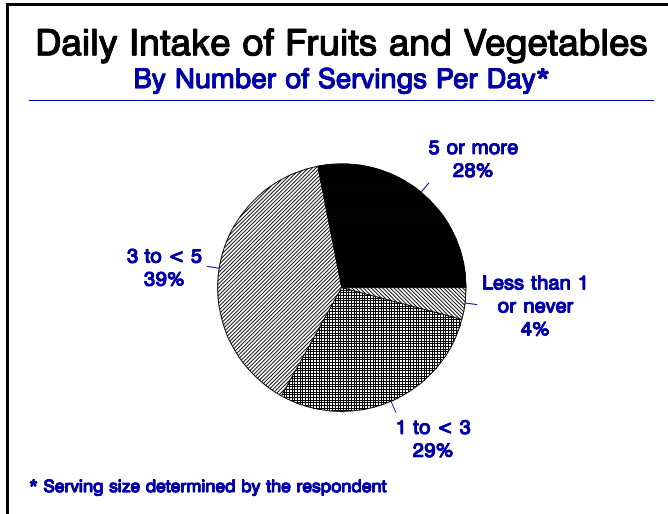


Figure 33

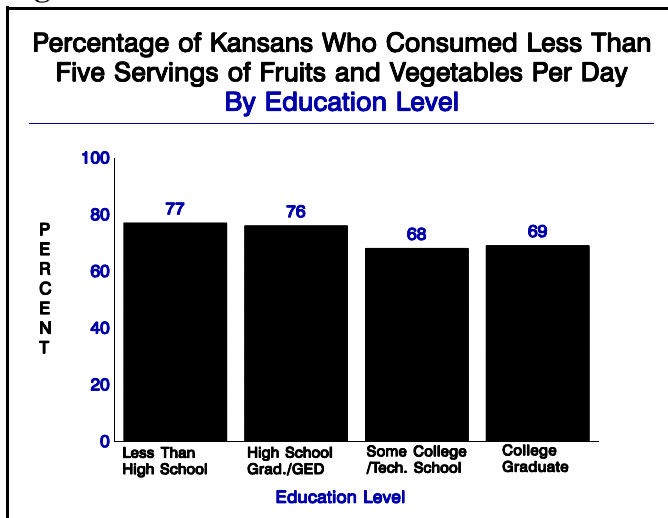


Figure 35

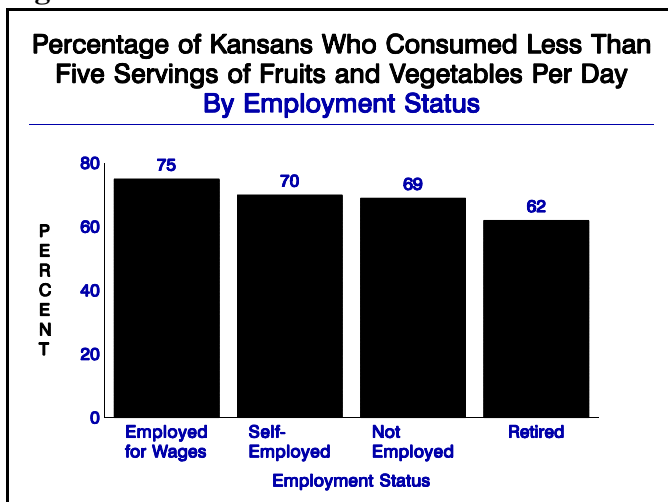


Figure 32

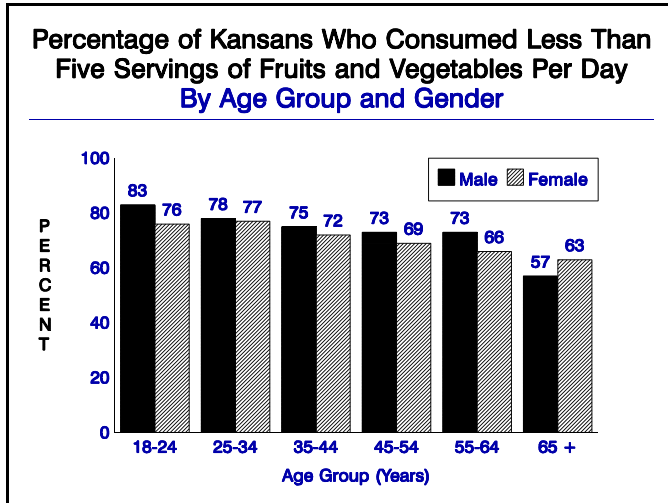


Figure 34

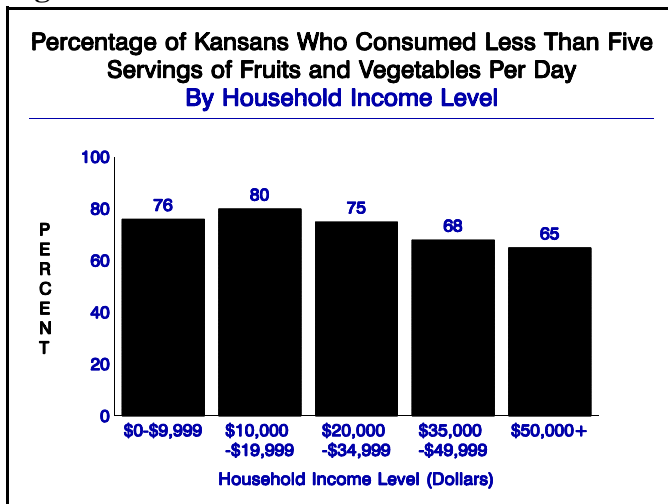
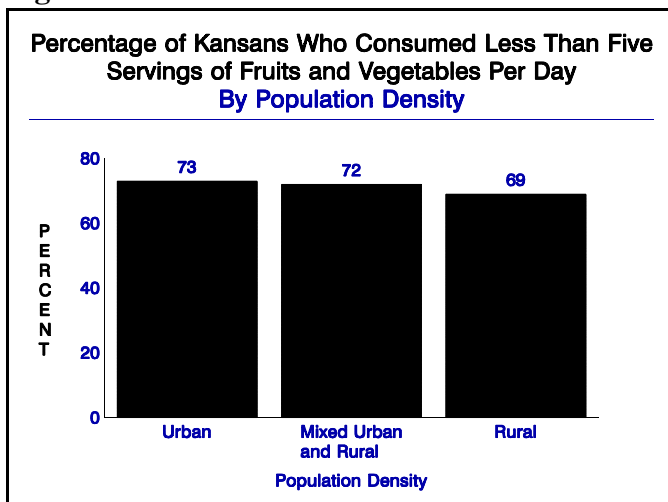
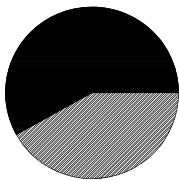


Figure 36





**Sedentary Lifestyle  
At Risk 58%**



**Sedentary Lifestyle:** *Persons who reported no physical activity or physical activity less than 3 times a week for less than 20 minutes each time, excluding job-related activity.*

**Regular Physical Activity:** *Persons who reported engaging in physical activity at least 5 times per week for at least 30 minutes each time, excluding job-related activity.*

## Physical Activity

### Background

Men and women of all ages benefit from regular physical activity. Physical activity reduces the risk of premature mortality in general, and helps prevent or control hypertension, colon cancer, diabetes mellitus, and cardiovascular disease, particularly coronary heart disease<sup>10</sup>. Physical activity improves mental health by relieving the symptoms of depression and anxiety and improving mood<sup>10</sup>. Physical activity is important for the health of muscles, bones, and joints; strength training and other forms of exercise which build muscular strength, endurance and flexibility help protect against injury and disability, and can help older adults maintain independent living status and reduce their risk of falling<sup>10</sup>. Regular physical activity is an important component in losing weight and maintaining normal body weight, and may favorably effect body fat distribution. It is recommended that a person engage in 30 minutes of moderate physical activity (e.g. walking, bicycling, raking leaves, or taking the stairs instead of the elevator) on most, if not all, days of the week. Moderate physical activity can be beneficial when it is accumulated in several short sessions over the course of the day. Persons engaging in physical activity of longer duration or of more vigorous intensity are likely to derive greater health benefits<sup>10</sup>.

### Who's At Risk Among Kansans

Almost three-fifths (58%) of Kansans reported having a sedentary lifestyles, including 36% of Kansans who did not engage in any kind of physical activity. Males reported having a sedentary lifestyle (60%) only slightly more often than females (57%). The proportion of Kansans who reported having a sedentary lifestyle increased with advancing age and decreased with rising household income and greater educational attainment. Kansans who were African-American, self-employed, retired, widowed, divorced or separated, or living in a rural county more frequently reported having a sedentary lifestyle.

### Who's Most Likely to Exercise

Nearly a fifth (18%) of Kansans reported that they engaged in physical activity the recommended five times a week for at least thirty minutes per occasion. Males were slightly more likely to engage in regular physical activity (19%) than females (17%). The percentage of Kansans who engaged in regular physical activity decreased with advancing age and increased with rising household income and higher levels of education. Kansans who were never married or members of an unmarried couple, or living in a mixed urban and rural county were more likely to engage in regular physical activity.

### Most Common Types of Physical Activities

The most common physical activities engaged in by respondents who exercised at all were walking (61%), running/jogging (15%), weight lifting (14%), bicycling/exercise bike (14%),

Figure 37

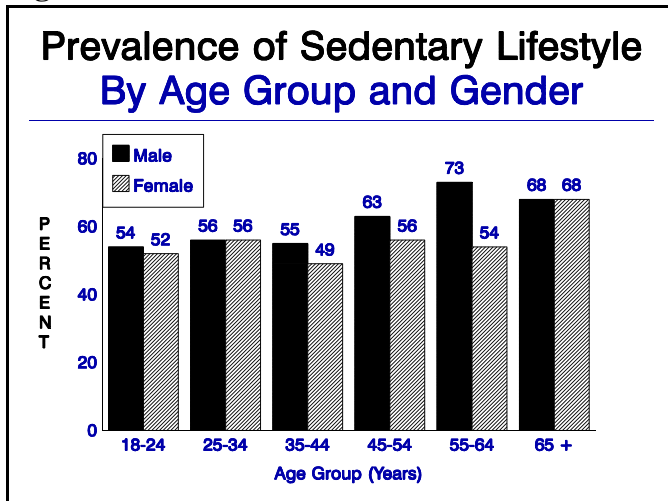


Figure 39

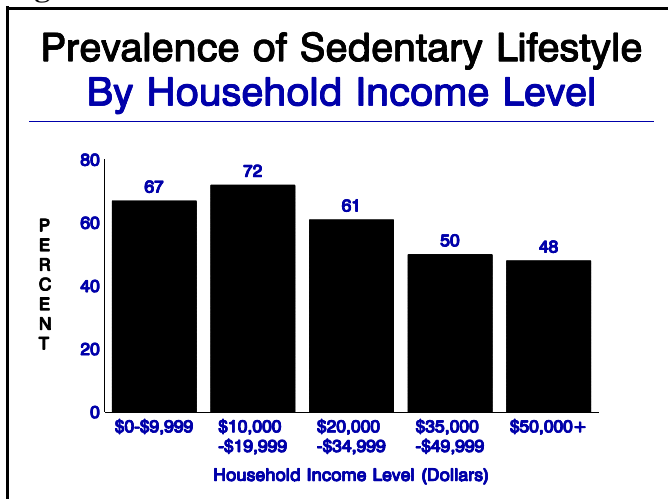
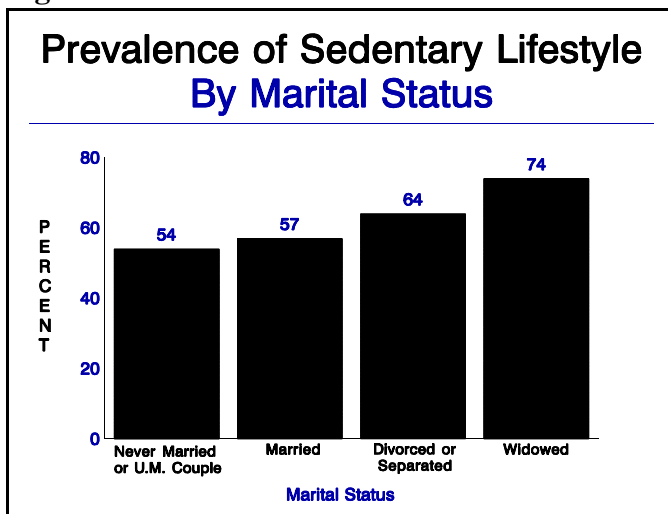
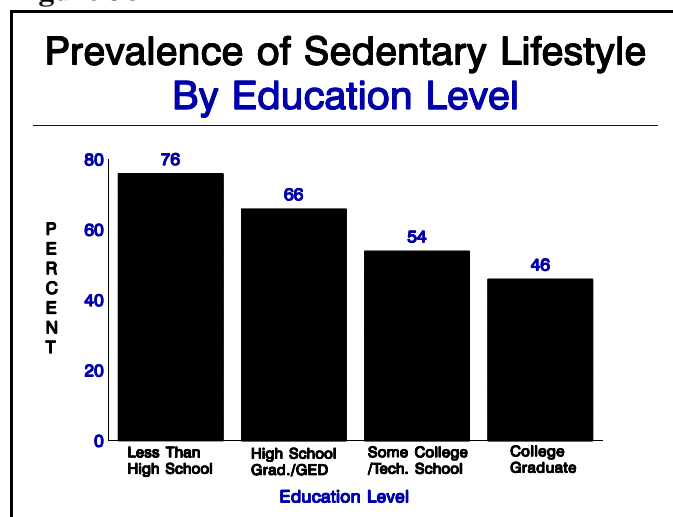


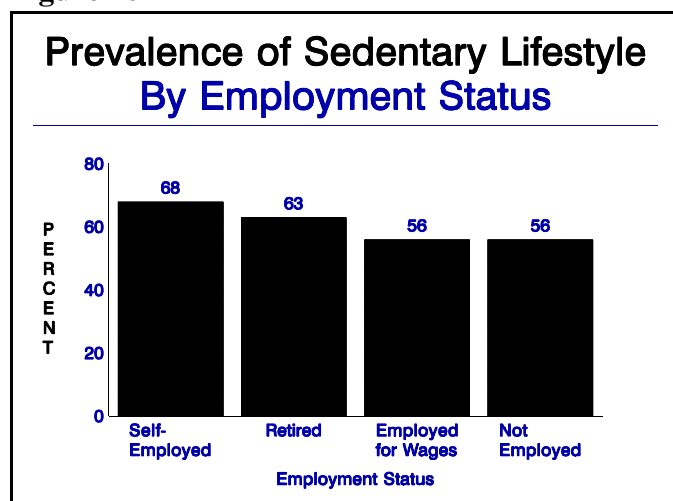
Figure 41



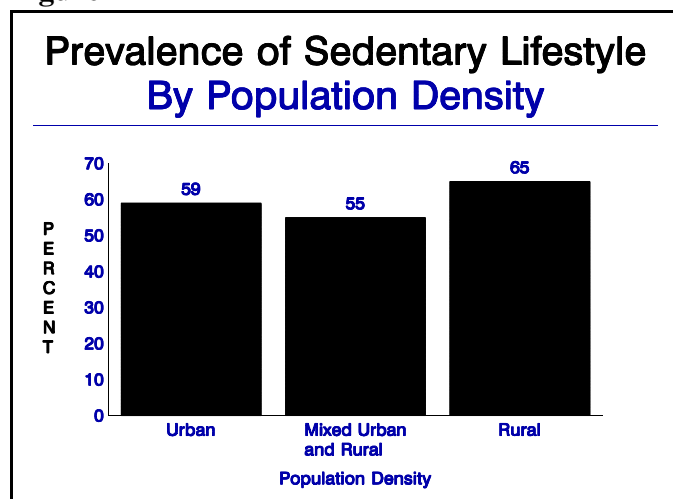
**Figure 38**



**Figure 40**



**Figure 42**



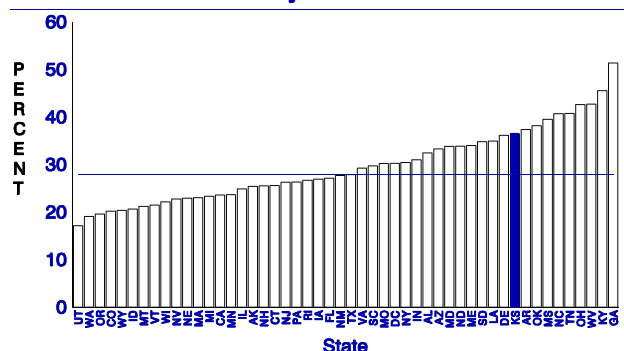
gardening (10%), aerobics (8%), health club exercise (8%), golf (8%), basketball (6%), calisthenics (6%), home exercise (5%), softball (5%), and swimming (5%).

### Kansas and the United States

During 1996, Georgia had the highest percentage of persons who engaged in no form of physical activity (51%) and Utah reported the lowest percentage of persons who engaged in no form of physical activity (17%). Kansas reported the tenth highest percentage of persons who engaged in no form of physical activity. The United States median percentage of persons who engaged in no form of physical activity was 28% in 1996.

Figure 43

Percentage of Persons Who Engaged in No Form of Physical Activity By State



In 1996, Wyoming reported the highest percentage of persons who engaged in regular physical activity (28%) and Ohio had the lowest percentage of persons who engaged in regular physical activity (10%). Kansas reported the seventeenth lowest percentage of persons who engaged in regular physical activity. The median percentage of persons who engaged in regular physical activity was 21% in the United States during 1996.

Figure 44

Percentage of Persons Who Engaged in Regular Physical Activity By State

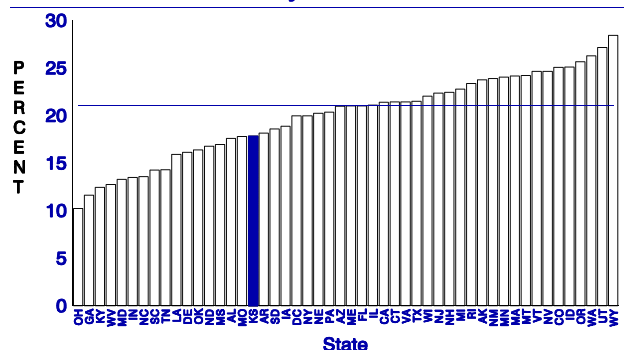


Figure 45

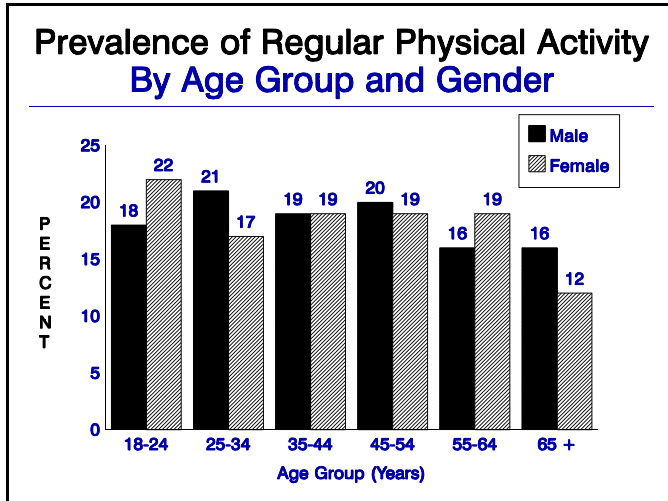


Figure 47

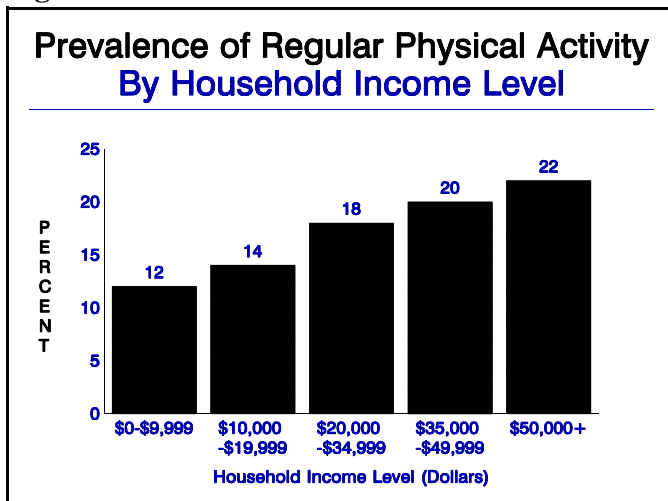


Figure 49

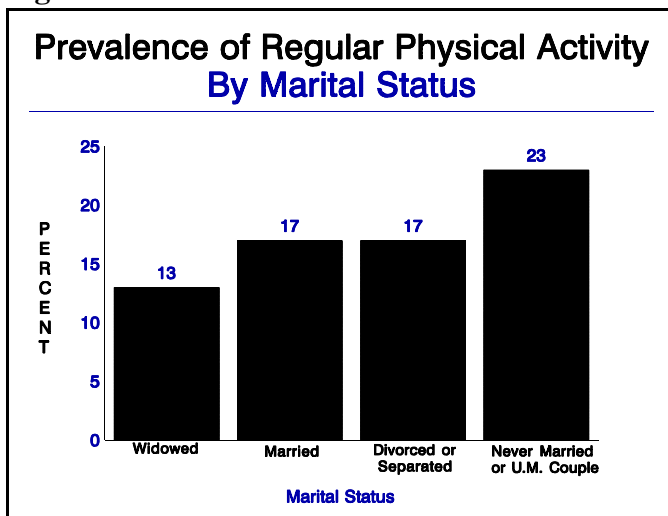


Figure 46

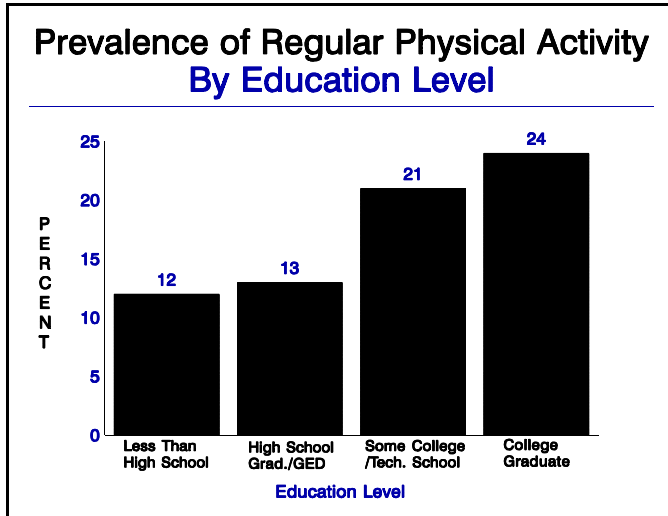


Figure 48

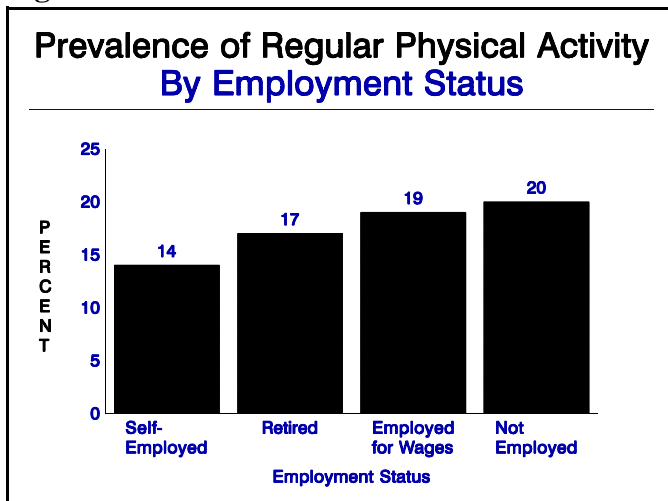
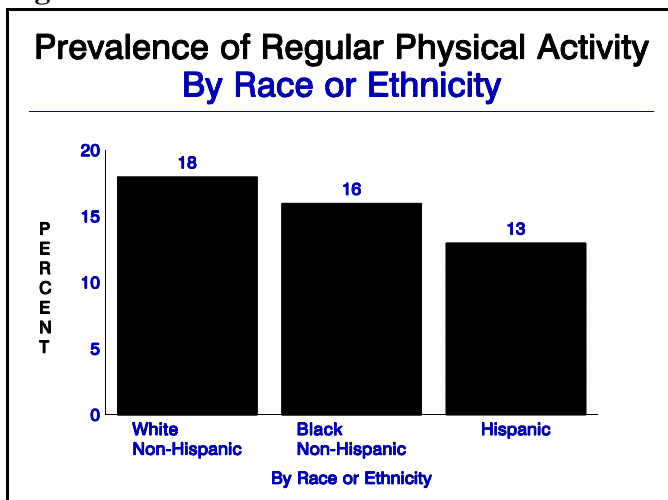
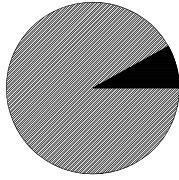


Figure 50



HIV/AIDS  
At Risk 8%



**HIV/AIDS At Risk:** *Respondents who reported their risk of contracting the HIV virus as medium or high.*

## HIV/AIDS

The results presented in this chapter differ from results in previous chapters in that they do not indicate a prevalence of health risk, but represent beliefs and attitudes towards a particular health risk. Only respondents aged 18 to 64 were asked questions relating to HIV/AIDS.

### Background

Acquired immunodeficiency syndrome (AIDS) is a life-threatening condition representing the later stages of infection with the human immunodeficiency virus (HIV). Infection with HIV results in slow, progressive damage to the immune system and certain other organ systems. As the immune system weakens, certain opportunistic infections and cancers not normally seen in healthy individuals result in severe and frequently fatal illness. Over a million persons in the United States are estimated to be infected with HIV, and many are unaware that they have the virus<sup>8</sup>. In Kansas, 1,794 cases of AIDS and 1,128 deaths due to AIDS had been reported through December 31, 1996<sup>11</sup>.

### Who's At Risk Among Kansans

When asked what their chances of contracting HIV were, 2% of respondents reported their risk as high, 6% as medium, 37% as low; 51% thought there was no possibility they would contract HIV, and 5% were unsure of or refused to identify their risk. Males were more likely to report being at risk for contracting HIV (9%) than females (6%). The percentage of respondents identifying themselves as being at risk for contracting HIV decreased with advancing age. Kansans who had some college education, who had household incomes of \$10,000 to \$19,999, who were African-American, not employed for wages, or were never married or a member of an unmarried couple more frequently reported being at risk for contracting HIV.

### HIV Testing Among Kansans

Almost a third (30%) of survey respondents reported they had ever received a HIV blood test. It was more common for males to report having had an HIV blood test (32%) than females (28%). The proportion of persons who had received an HIV blood test was highest among the youngest age groups and lower income groups. Among those who had been tested for HIV, 66% reported it had been within the past three years. Of those respondents who reported they were at risk for HIV, 43% reported that they had been tested for HIV. The most common reasons given for getting an HIV blood test were: just to see if they were infected (26%), routine check-up (15%), pregnancy test (11%), military service or induction (9%), blood donation (9%), life insurance (5%), employment (4%), health insurance (4%), or occupational exposure (4%). The most frequently used testing sources were private doctors or HMOs (35%), hospital or emergency room (13%), military site (11%), health department (9%), or community health clinic (6%). Three-fourths (75%) of Kansans who had been tested for HIV reported they had received the results of their last HIV test, 14% had not received the results, and 11% didn't know or refused to say whether they had received the results.

of their last HIV test. Among persons who



Figure 51

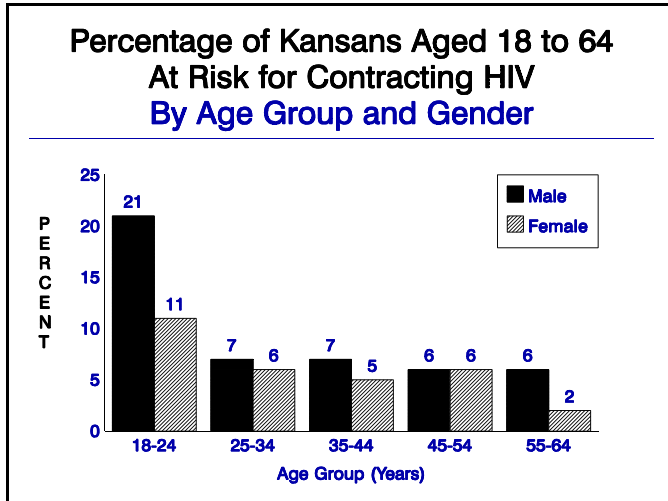


Figure 53

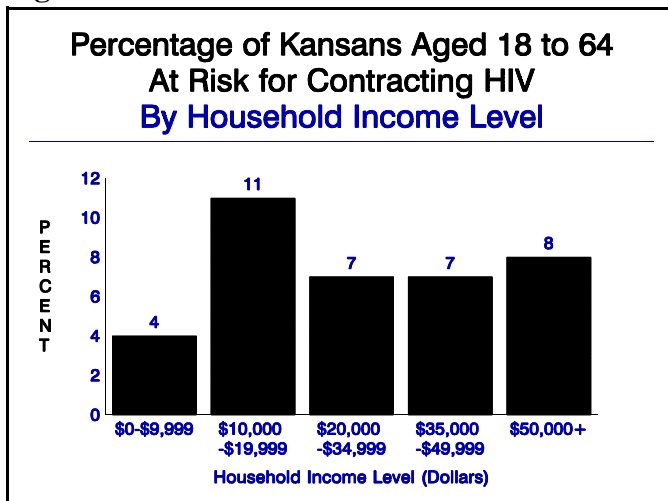


Figure 55

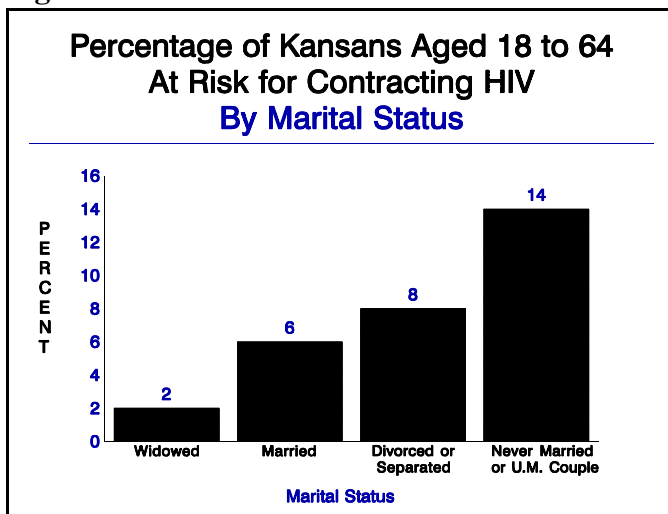


Figure 52

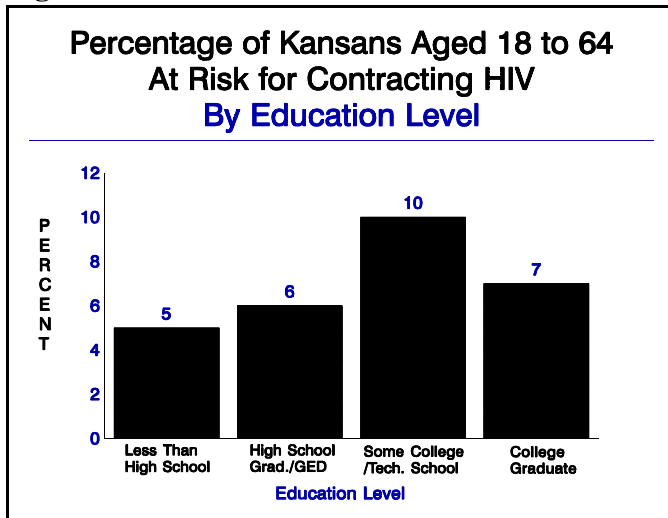


Figure 54

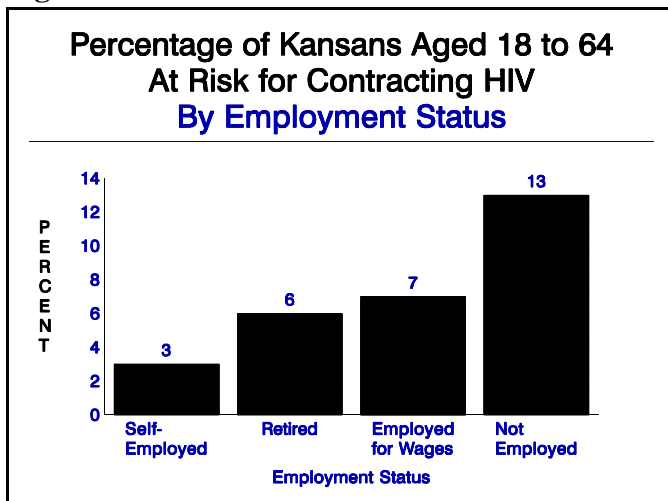
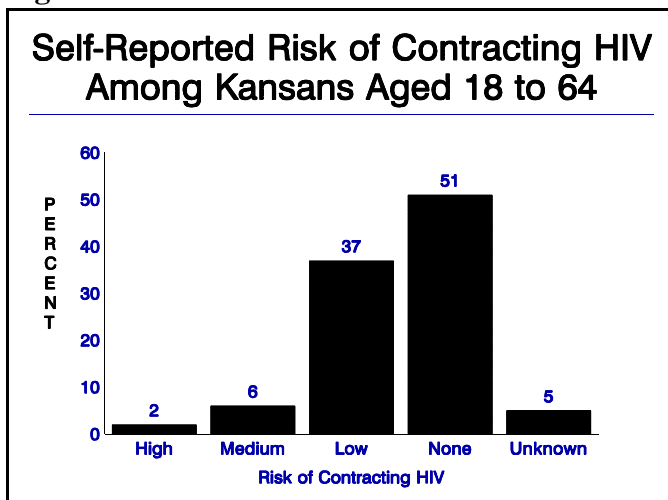


Figure 56



had received the results of their HIV blood test, 23% reported that they received counseling or talked with a health professional about the results of their test.

### Knowledge and Attitudes Towards HIV/AIDS

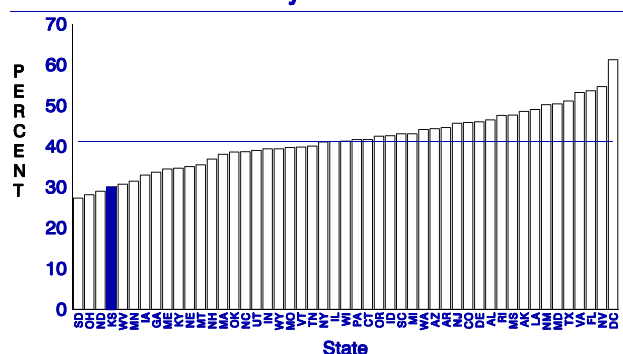
When asked at what grade HIV and AIDS education should begin in school, 20% responded kindergarten, 24% said 1st to 3rd grade, 31% replied 4th to 6th grade, 11% said 7th to 9th grade, 1% said 10th to 12th grade, 2% responded that HIV and AIDS education should not be taught in school, and 12% were unsure or refused to answer. When asked how effective a properly used condom is for protection against getting infected with HIV through sexual activity, 27% correctly responded very effective, 53% replied somewhat effective, 8% said not at all effective, 7% did not know how effective it was, 1% did not know the method, and 5% refused to respond. Four-fifths (82%) of respondents reported that if they had a sexually active teenager, they would encourage him or her to use a condom, 3% would not, 9% would give other advice, and 6% were unsure or refused to answer. When asked if they had changed their sexual behavior during the past 12 months due to what they knew about HIV, 11% responded yes, 83% replied no, and 6% refused to answer. Respondents who answered affirmatively were asked three more questions relating to changes in sexual behavior. Among Kansans who had changed their sexual behavior during the past 12 months due to what they knew about HIV, 65% reported having sexual intercourse with only one partner, 75% used condoms for protection, and 93% reported being more careful in selecting sexual partners.

### Kansas and the United States

During 1996, the District of Columbia reported the highest percentage of persons aged 18 to 64 who had received an HIV blood test (61%), while South Dakota reported the lowest percentage of persons aged 18 to 64 who had received an HIV blood test (27%). Kansas reported the fourth lowest percentage of persons aged 18 to 64 who had received an HIV blood test. In the United States, the median percentage of persons aged 18 to 64 who had received an HIV blood test was 41% in 1996.

Figure 57

#### Percentage of Persons Aged 18 to 64 Who Had Received an HIV Blood Test By State



The District of Columbia had the highest percentage of persons aged 18 to 64 who correctly answered that a properly used condom was very effective at preventing the spread of HIV through sexual activity (61%) and South Dakota reported the lowest percentage who responded correctly (27%). Kansas had the eighth lowest percentage of persons aged 18 to 64 who correctly answered that a properly used condom was very effective in preventing the spread of HIV through sexual activity. The U.S. median percentage of persons aged 18 to 64 who correctly answered that a properly used condom is very effective at preventing the spread of HIV through sexual activity was 41% in 1996.

Figure 58

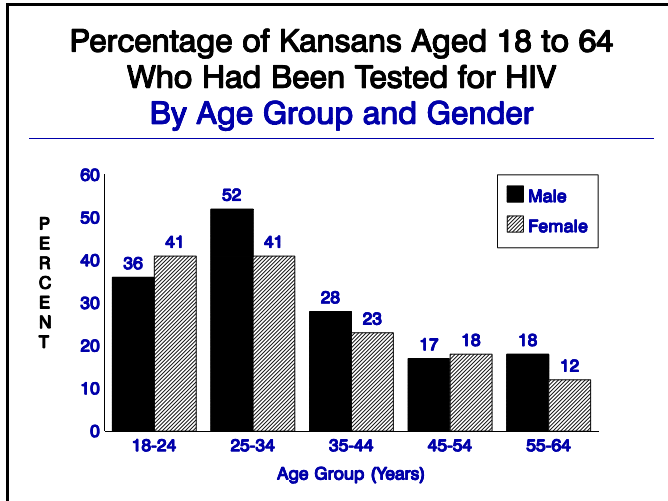


Figure 60

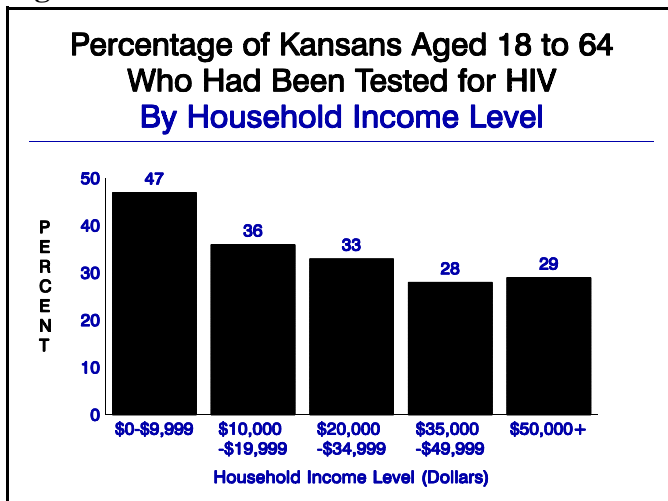


Figure 62

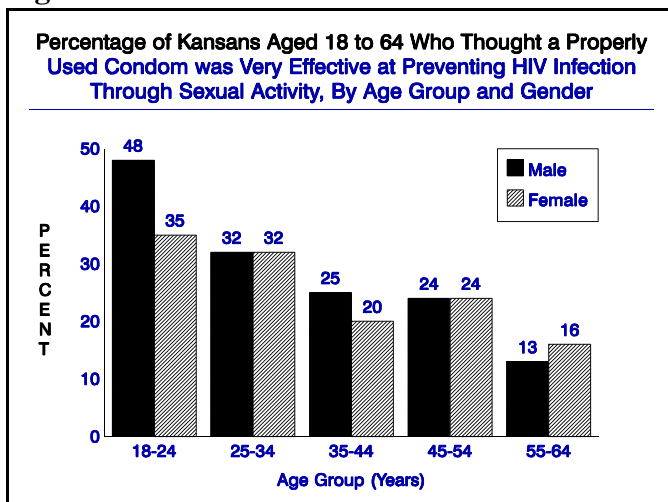


Figure 59

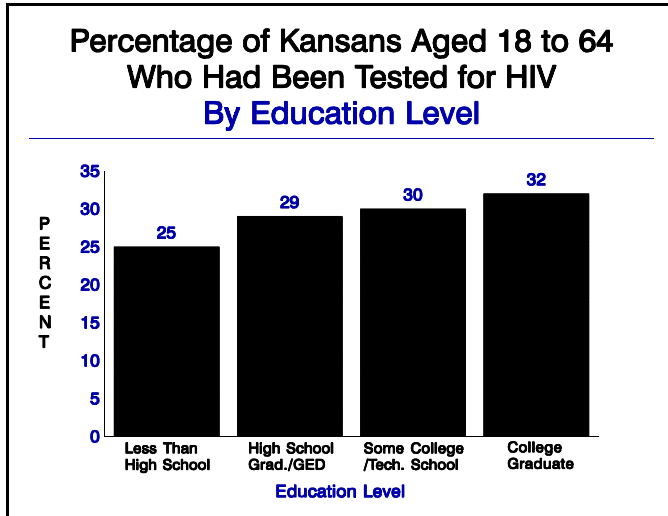


Figure 61

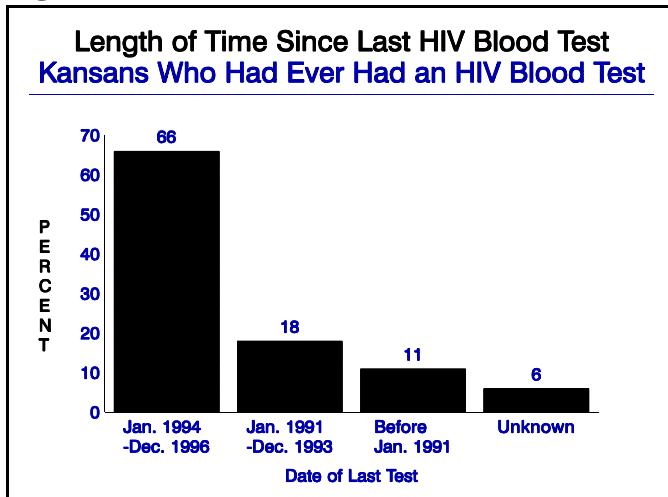
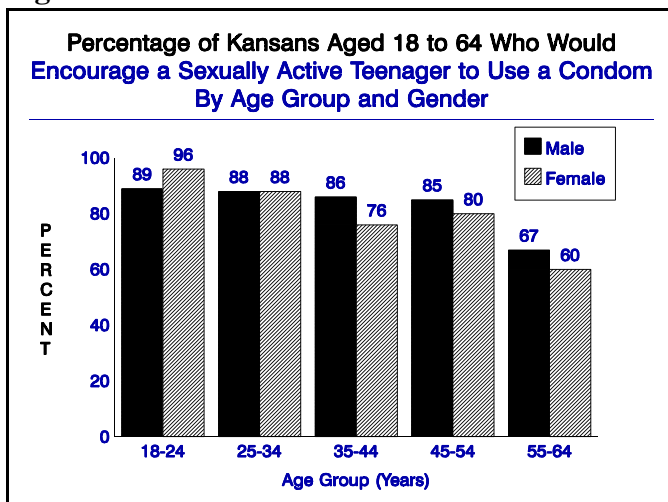
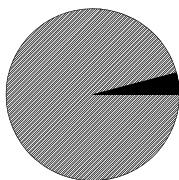


Figure 63



## Diabetes Mellitus At Risk 4%



**Diabetes Mellitus:** *Respondents who report they were told by a doctor that they have diabetes.*

# Diabetes Mellitus

## Background

Diabetes mellitus is a chronic disease in which the body is incapable of adequately producing and/or using insulin, which is necessary to convert glucose (sugar) into energy. It has been estimated that 126,000 Kansans have diabetes mellitus, yet half do not know that they have diabetes<sup>12</sup>. Diabetes was the seventh leading cause of death in Kansas in 1996, resulting in 604 deaths<sup>13</sup>, and is estimated to contribute to another 1,000<sup>12</sup>. Diabetes is a serious chronic disease which makes those with the condition 25 times more prone to blindness, twice as likely to develop cardiovascular disease, 15 times more likely to have a lower extremity amputated, and 17 times more likely to develop kidney disease<sup>14</sup>.

## Who's At Risk Among Kansans

According to 1996 BRFSS data, 4% of Kansans had been diagnosed by a doctor as having diabetes mellitus. There was little difference in the prevalence of diabetes mellitus between males (3%) and females (4%). The prevalence of diabetes mellitus increased with advancing age, and decreased with rising household income and higher levels of education. Kansans who were retired, divorced, separated, widowed, or of African-American ethnicity more frequently reported having diabetes.

## Characteristics of Kansans with Diabetes

The average age at diagnosis of diabetes was age 53. Among respondents with diabetes, 60% were overweight based on BMI, compared to 25% for respondents without diabetes. About a quarter (27%) of Kansans with diabetes reported that they were currently using insulin to help control their condition. Three-fourths (74%) of Kansans with diabetes reported that they had seen a health professional about their diabetes at least once during the past year. Among respondents who reported having seen a health professional for their diabetes during the last year, 53% reported that they had their feet checked for any sores or irritations. Among Kansans with diabetes, 59% reported having an exam in which their pupils were dilated within the past 12 months, 18% reported their pupils had been dilated during an eye exam 1 to 2 years ago, 17% reported dilated pupils during an eye exam 2 or more years ago, 6% reported never having had their pupils dilated during an eye exam, and 1% were not sure.

## Kansas and the United States

During 1996, Alabama had the highest prevalence of diabetes mellitus (7%), while Colorado reported the lowest prevalence of diabetes mellitus (3%). Kansas reported the ninth lowest prevalence of diabetes mellitus. The median prevalence of diabetes mellitus in the United States was 4% during 1996.

Figure 64

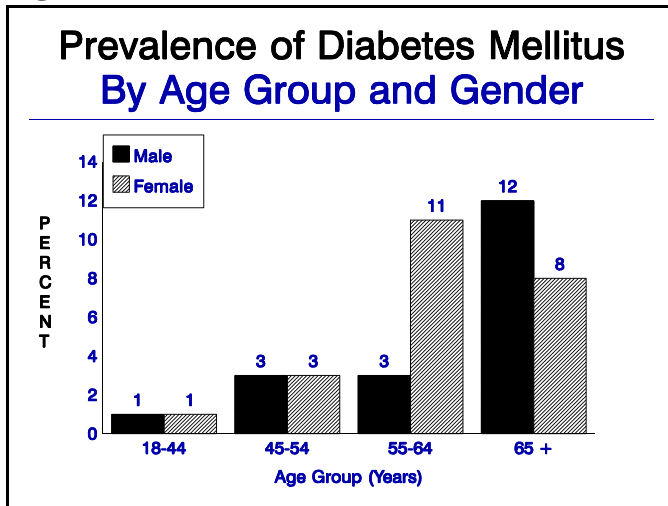


Figure 65

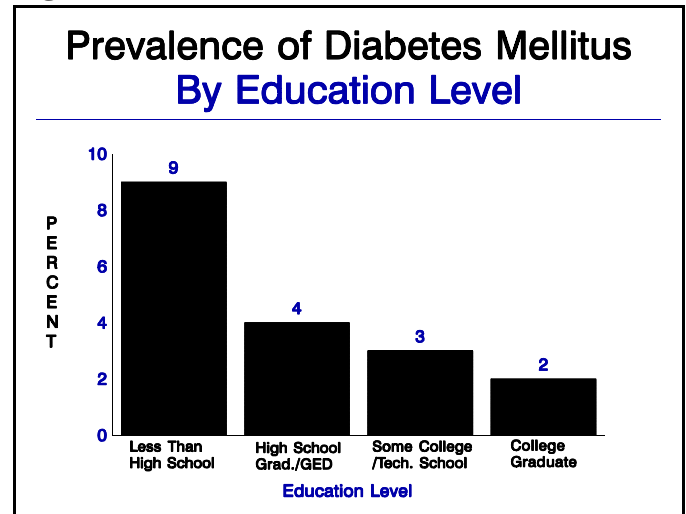


Figure 66

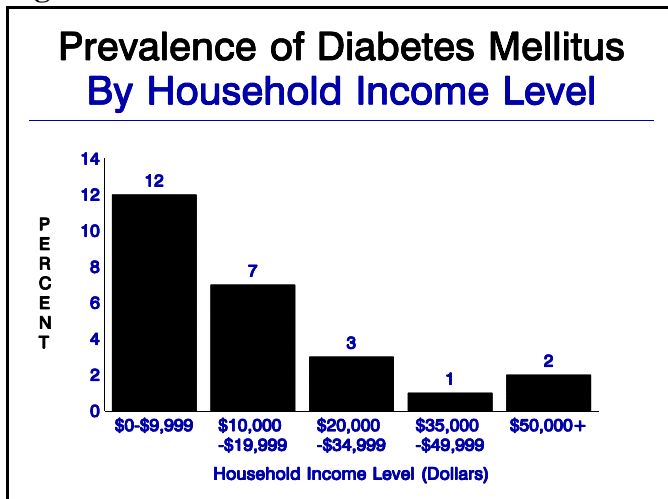
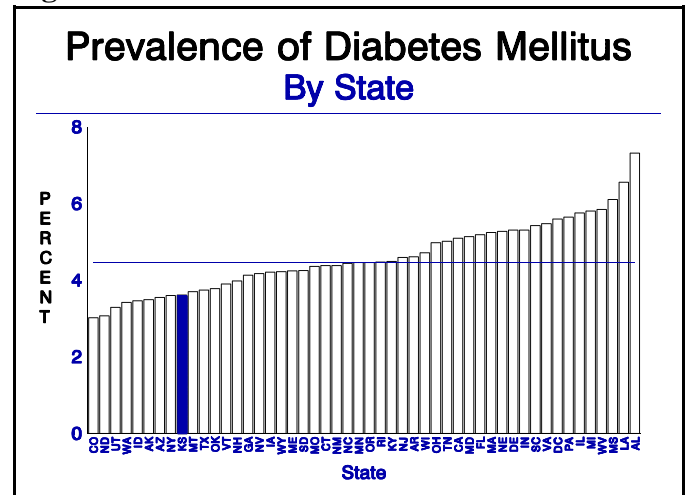
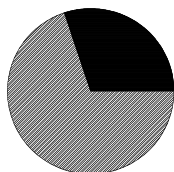


Figure 67



Lack a Recent  
Mammogram  
At Risk 30%



**Lack A Recent Clinical Breast Exam:** *Female respondents who had not had a recent clinical breast exam (within the past 3 years for women aged 20-39; within the past 2 years for women aged 40 and older).*

**Lack A Recent Mammogram:** *Female respondents aged 40 and older who had not had a mammogram within the past two years.*

## Breast Cancer Screening

### Background

Breast cancer is the most commonly occurring cancer and second leading cause of cancer death among women. Every year in Kansas over 1,100 new cases of breast cancer are diagnosed<sup>15</sup>, and nearly 400 women die from breast cancer<sup>13</sup>. Current national projections are that one woman in eight will develop breast cancer at some time in her life<sup>3</sup>. Risk factors for breast cancer are advancing age, family history of breast cancer, and hormonal factors such as early onset of menstruation, late menopause, no full term pregnancies or first pregnancy after the age of 30. Breast cancer rarely occurs in men. Because these risk factors are biological and difficult or impossible to control, the best way to reduce breast cancer mortality is through regular breast cancer screenings to detect the disease in the early stages. By following the screening guidelines for clinical breast exam and mammography the number of breast cancer deaths could be reduced by over 30%<sup>8</sup>. The American Cancer Society guidelines for the early detection and prevention of breast cancer include monthly self breast exam for all women, a clinical breast exam every 3 years for women aged 20-39, and for women aged 40-49 a clinical breast examination every year and a mammogram every one to two years. Women aged 50 and older should receive a clinical breast exam and mammogram every year.

### Who's At Risk Among Kansans

Among female respondents twenty to thirty-nine years of age, 10% had not received a clinical breast exam within the previous three years. Only 6% of females respondents in this age group had never received a clinical breast exam.

Among female respondents aged forty to forty-nine, 13% reported they had not received a clinical breast exam within the past two years, including 3% who reported never having received a clinical breast exam. A third (34%) of females respondents in this age group had not received a mammogram during the last two years, including a quarter (25%) who had never received a mammogram. Thirty-eight percent of women aged 40 to 49 had not received both a clinical breast exam and a mammogram within the previous two years.

Among female respondents aged fifty and older, nearly one-fourth (24%) had not received a clinical breast exam within the past two years, including 12% who reported never having received a clinical breast exam. Twenty-eight percent of women over fifty years of age reported that they had not received a mammogram during the past two years, including 20% who reported that they had never received a mammogram. Almost a third (35%) of females aged 50 and older reported that they had not received both a mammogram and a clinical breast exam within the previous two years.



Figure 68

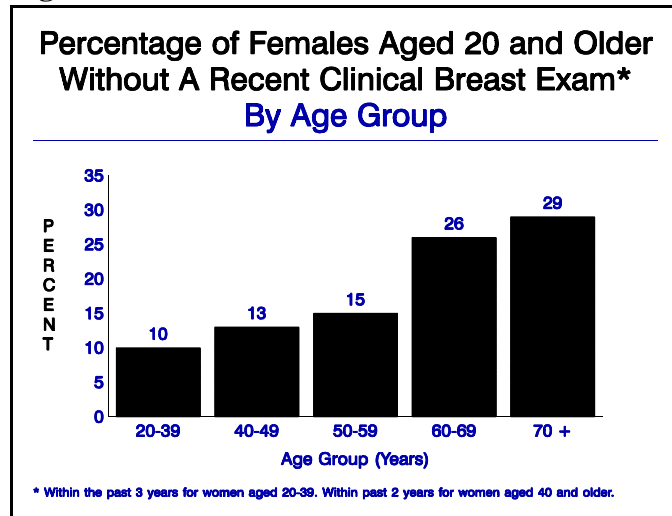


Figure 70

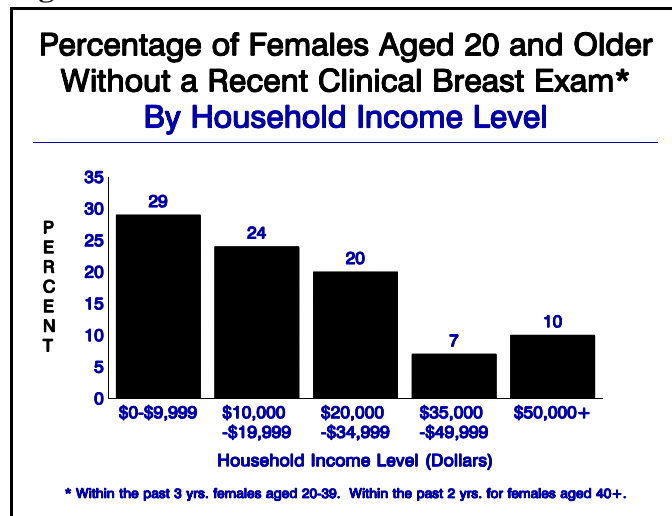


Figure 72

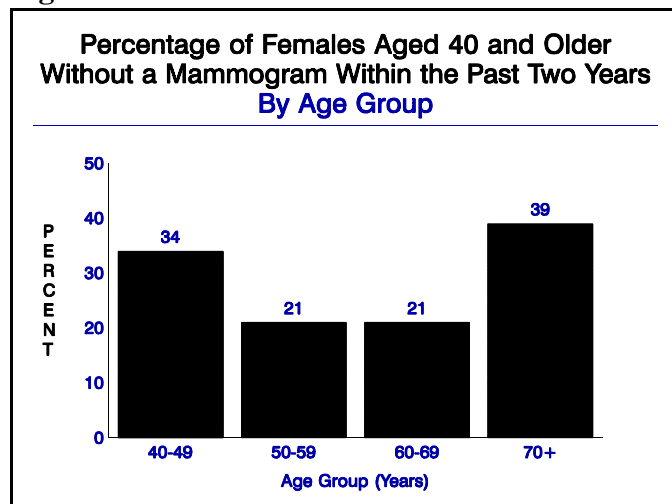


Figure 69

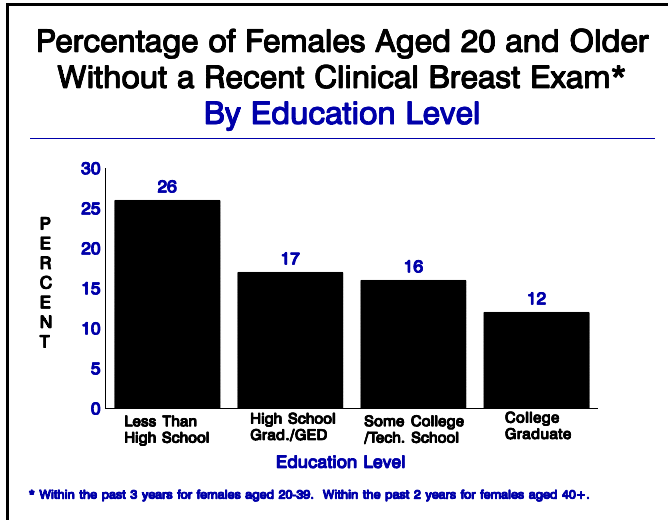


Figure 71

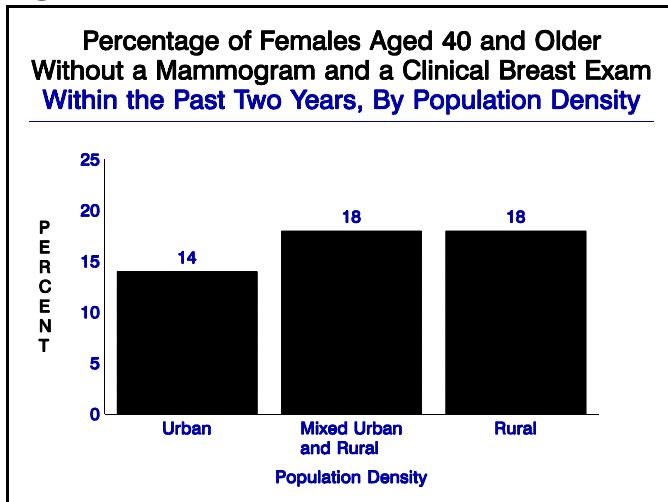
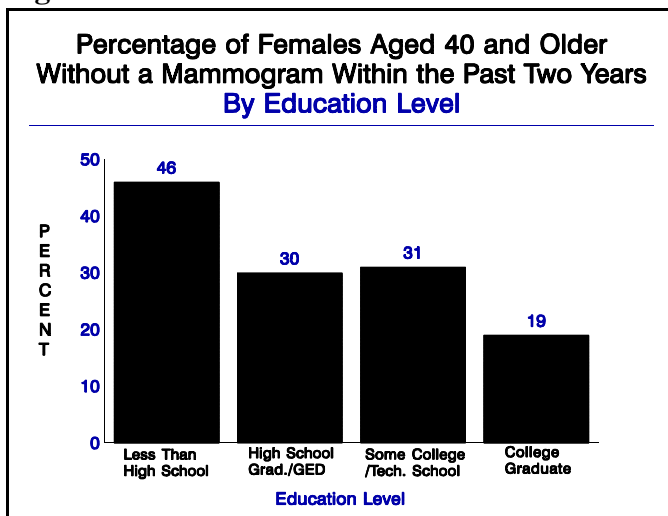


Figure 73



The proportion of female respondents who had not received the breast cancer screening recommended for their age group generally decreased with rising household income and greater educational attainment. With advancing age the proportion of females who had not received a recent clinical breast exam increased while the proportion of females who had received a recent mammogram generally increased. Kansans who were widowed or retired were more likely to report that they had not received the breast cancer screening recommended for their age group.

### Reason for Last Breast Cancer Screening

Among female Kansans who reported that they had ever received a clinical breast exam, 96% reported it was part of a routine check-up, 3% responded it was to check a breast problem, 1% reported that it was because they had breast cancer, and 1% were unsure or refused to answer. Among females respondents who had ever received a mammogram, 89% reported it was part of a routine check-up, 7% reported it was to check a breast problem, and 2% reported it was because they had breast cancer, and 1% were unsure or refused to answer.

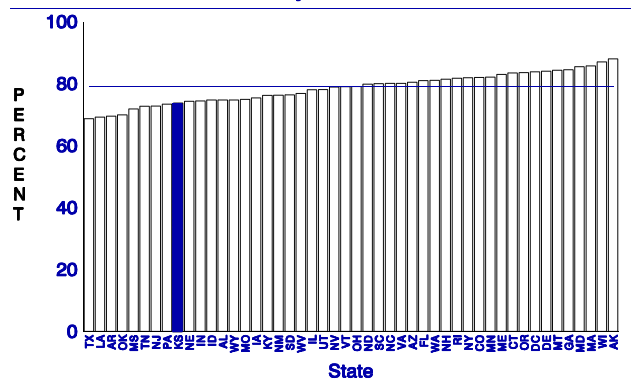
### Kansas and the United States

During 1996, Texas had the lowest percentage of women aged 40 and older who had ever received both a mammogram and a clinical breast exam (69%), while Alaska reported the highest percentage of women aged 40 and older who had ever received both a mammogram and a clinical breast exam (88%). Kansas had the ninth lowest percentage of women aged 40 and older who had ever received a mammogram and a clinical breast exam. The U.S. median percentage of women aged 40 and older who had ever received a mammogram and a clinical breast exam was 79% in 1996.

In 1996, Arkansas reported the lowest percentage of women aged 50 and older who had received both a mammogram and a CBE within the last two years (52%), while the District of Columbia reported the highest percentage who had received both exams within the last two years (75%). Kansas reported the twenty-first lowest percentage of women aged 50 and older who had received a mammogram and a CBE within the past two years. The U.S. median percentage of women aged 50 and older who had received both a mammogram and a CBE within the past two years was

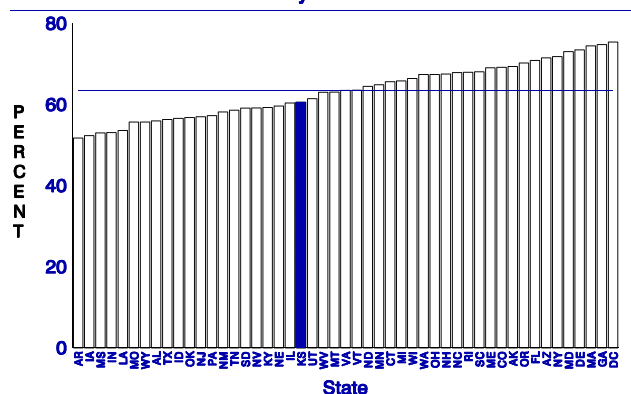
**Figure 74**

**Percentage of Women Aged 40 and Older Who Had Ever Received a Mammogram and a Clinical Breast Exam By State**



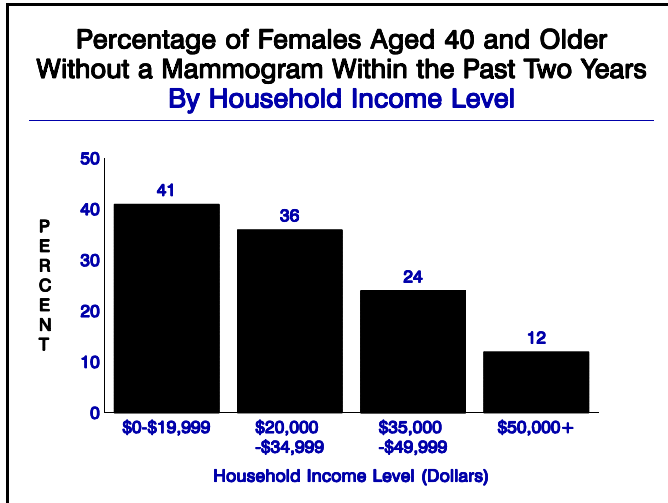
**Figure 75**

**Percentage of Women Aged 50 and Older Who Had Received a Mammogram and a Clinical Breast Exam Within the Past 2 Years By State**

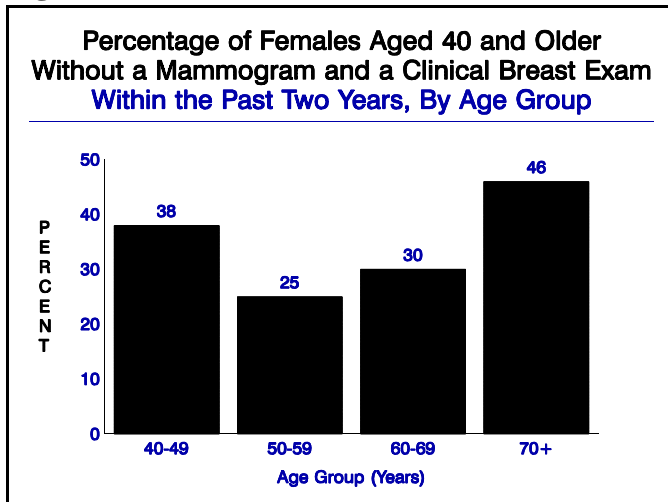


64%.

**Figure 76**



**Figure 78**



**Figure 80**

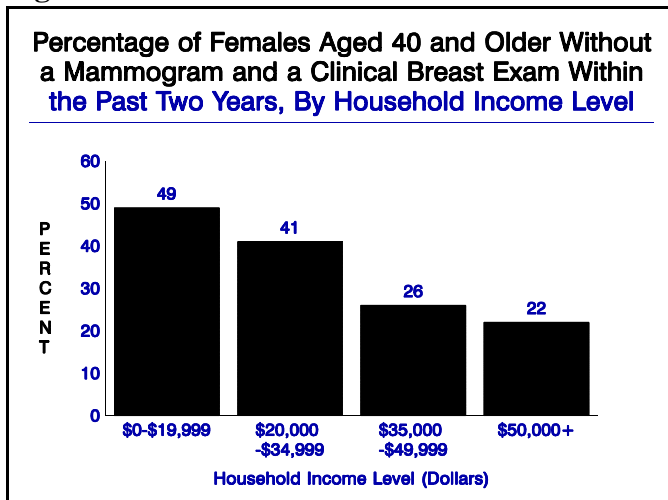


Figure 77

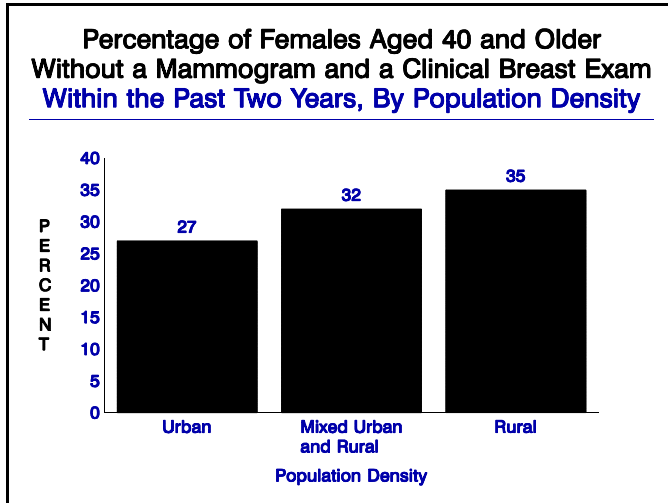


Figure 79

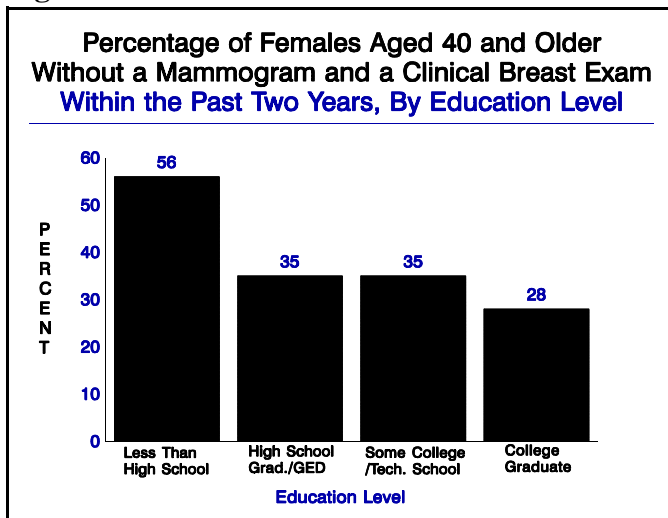
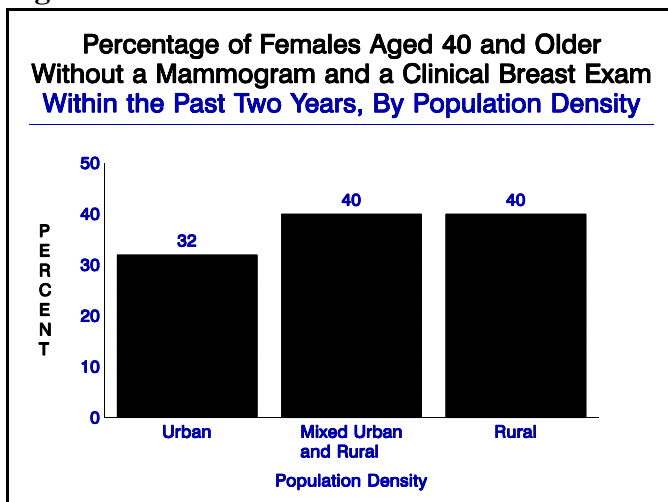
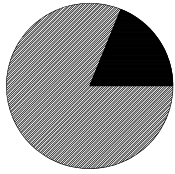


Figure 81



Lack a Recent  
Pap Smear Test  
At Risk 19%



**Lack A Recent Pap Smear Test:** *Female respondents, with a uterine cervix, who reported they had not received a pap smear test within the past two years.*

## Cervical Cancer Screening

### Background

Cancer of the uterine cervix is the fourth most commonly diagnosed cancer among women. Every year in Kansas approximately 400 women are diagnosed with cervical cancer<sup>3</sup>. Risk factors for cervical cancer include early age at first intercourse, multiple sex partners, cigarette smoking, and infection with certain types of the human papillomavirus. The American Cancer Society recommends that a Pap smear test be performed annually with a pelvic examination in women who are, or have been, sexually active or who have reached 18 years of age. Regular use of the Pap smear test to screen for cervical cancer (followed by appropriate treatment when needed) could reduce the risk of death by as much as 75%<sup>8</sup>.

### Who's At Risk Among Kansans

One-fifth (19%) of female respondents with a uterine cervix reported that they had not received a Pap smear test within the past two years, including 5% who reported that they had never received a Pap smear test. The proportion of women with a uterine cervix who had not received a Pap smear test during the previous two years generally increased with advancing age and generally decreased with rising household income and greater educational attainment. Females who were Hispanic, self-employed, retired, or widowed were more likely to report that they had not received a Pap smear test within the previous two years.

### Reason for Last Pap Smear Test

Among female respondents who had ever received a Pap smear test, 95% reported it was part of a routine check-up, 4% reported it was to check a current or previous problem, 1% responded it was done for some other reason, and 1% were unsure or refused to answer.

### Kansas and the United States

During 1996, among females with a uterine cervix, Iowa reported the lowest percentage of females who had ever received a Pap smear test (84%) and Georgia reported the highest percentage of females who had ever received a Pap smear test (97%). Kansas had the twelfth highest percentage of females who had ever received a Pap smear test. In the United States the median percentage of females who had ever received a Pap smear test was 90% in 1996.

**Figure 82**

**Percentage of Females Aged 18 and Older With a Uterine Cervix Who Had Ever Had a Pap Smear Test By State**

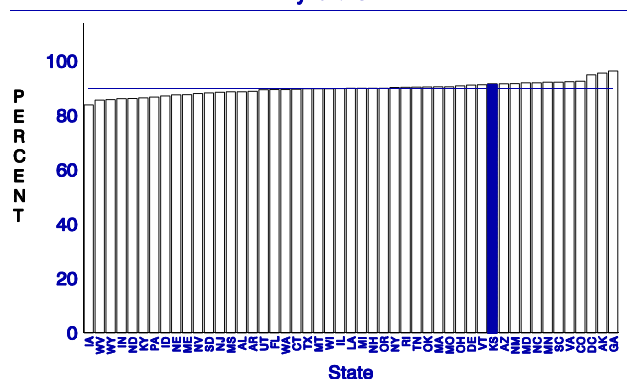


Figure 83

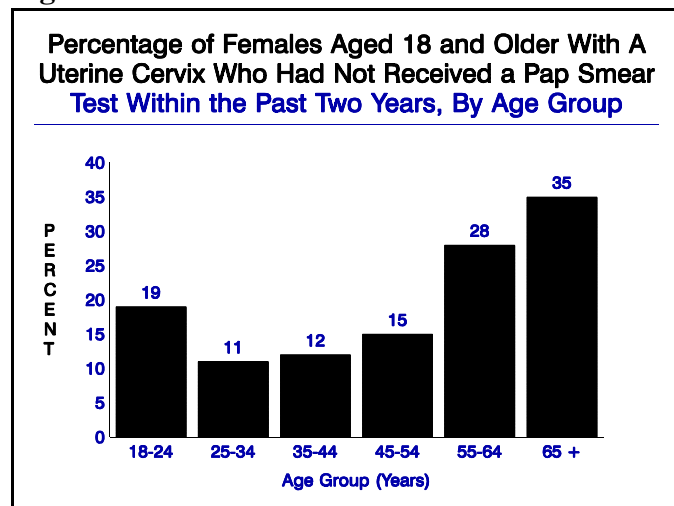


Figure 84

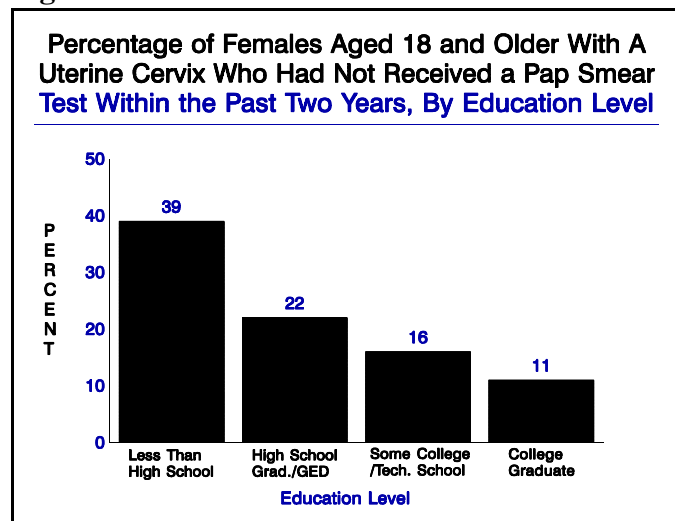


Figure 85

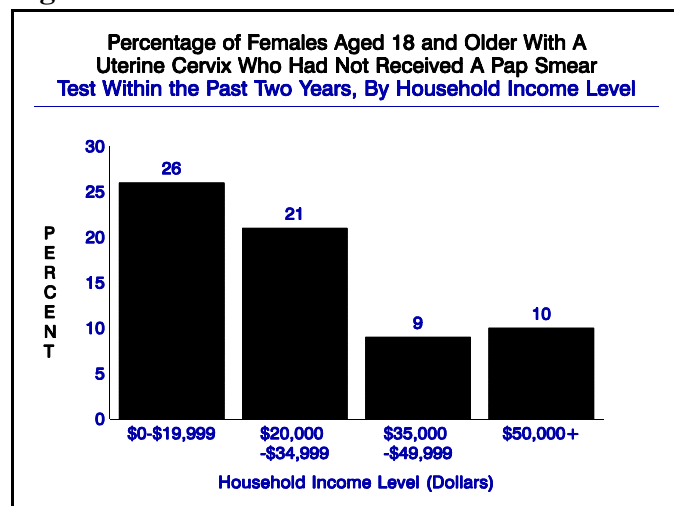


Figure 86

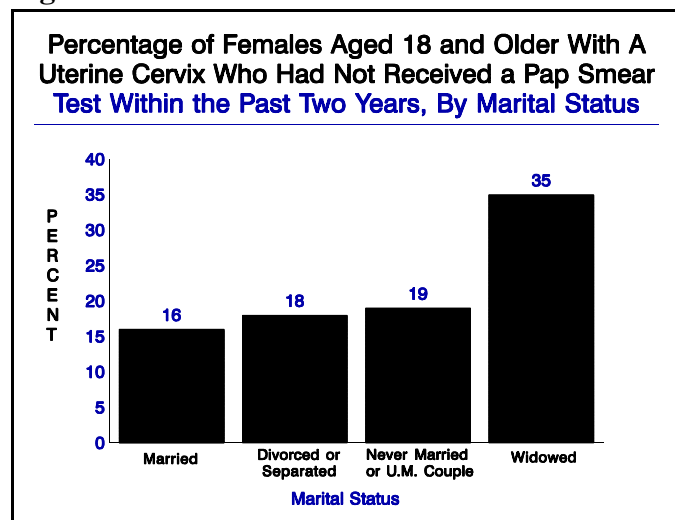
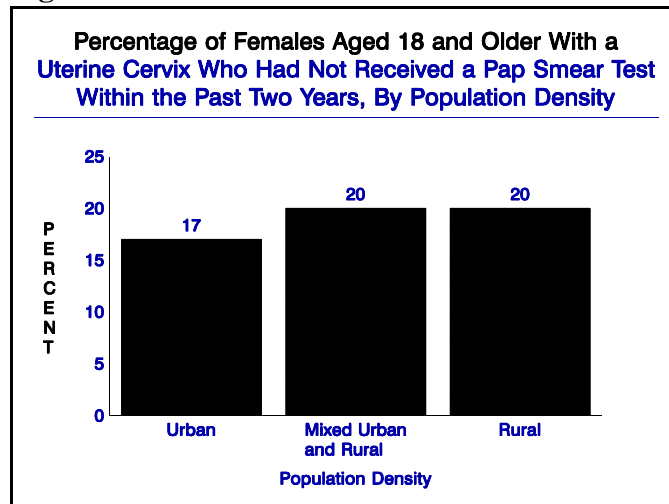
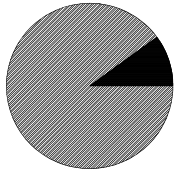


Figure 87





Lack Health  
Care Coverage  
At Risk 10%



**Lack Health Care Coverage:** Respondents who reported that they did not have any form of health care coverage, including health insurance, Health Maintenance Organizations (HMO), Medicare, Medicaid, or military insurance plans.

## Health Care Coverage and Access to Health Care

### Background

It has been established that many chronic conditions and diseases can be improved or prevented by utilizing preventive health services. In addition to adopting healthy lifestyle behaviors, early detection and treatment of medical conditions can avoid costly, debilitating and even deadly illnesses or conditions. The ability to pay can greatly influence the decision of a person to receive preventive services.

### Who's At Risk Among Kansans

One in ten Kansans (10%) reported that they lacked any form of health care coverage. Ten percent of males and females reported that they lacked any kind of health care coverage. The percentage of Kansans who reported that they lacked health care coverage decreased with advancing age, rising household income, and greater educational attainment. Kansans who were African-American, self-employed, not employed for wages, divorced or separated, or never married or a member of an unmarried couple were more likely to report that they lacked health care coverage.

Nine percent of respondents reported that they were unable to see a doctor due to the cost in the last year. Females reported being unable to see a doctor in the last year (10%) only slightly more frequently than males (8%). The proportion of Kansans who reported being unable to see a doctor due to the cost during the last year decreased with advancing age, rising household income, and higher levels of education. Being unable to see a doctor due to the cost during the last year was reported more frequently by Kansans who were African-American, Hispanic, or divorced or separated.

### Characteristics of the Health Care Coverage Used By Kansans

A quarter (24%) of Kansans with health care coverage reported that they received Medicare. Among Kansans with health care coverage who were not covered by Medicare, 85% were covered by employer sponsored health care plans, 9% were covered by plans bought by themselves or someone else, 1% by Medicaid or Medical assistance, and 5% by other sources. When asked how long they had been covered by their current health care plan, 11% responded 1 to 12 months, 9% reported 1 to 2 years, 9% said 2 to 3 years, 8% replied 3 to 5 years, 61% reported five or more years, and 2% were unsure how long they had their current coverage or refused to respond. When asked if there was a book or list of doctors associated with their health care coverage, 59% responded yes, 35% said no, and 6% did not know or declined to answer. When asked if their health care plan required them to pick a certain doctor or clinic for all their routine health care, 47% said yes, 49% replied no, and 3% were unsure.

Figure 88

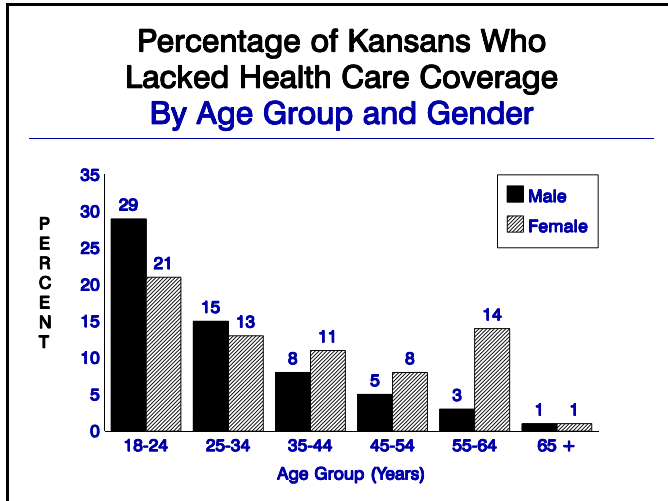


Figure 90

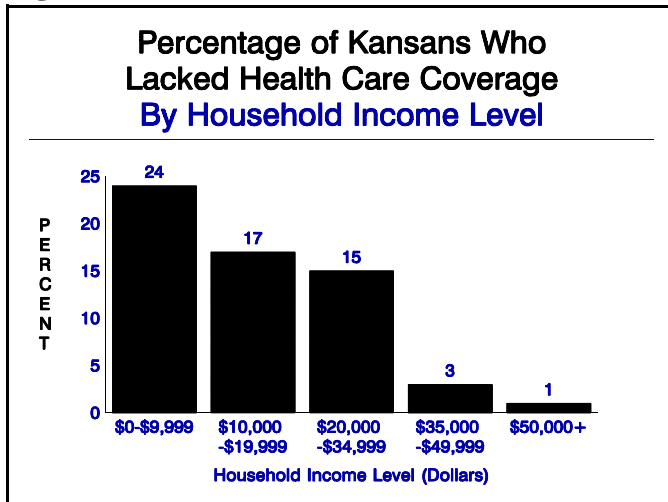
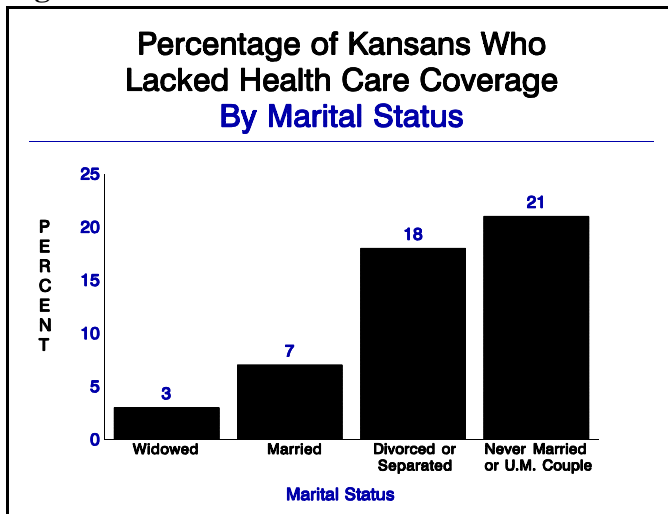
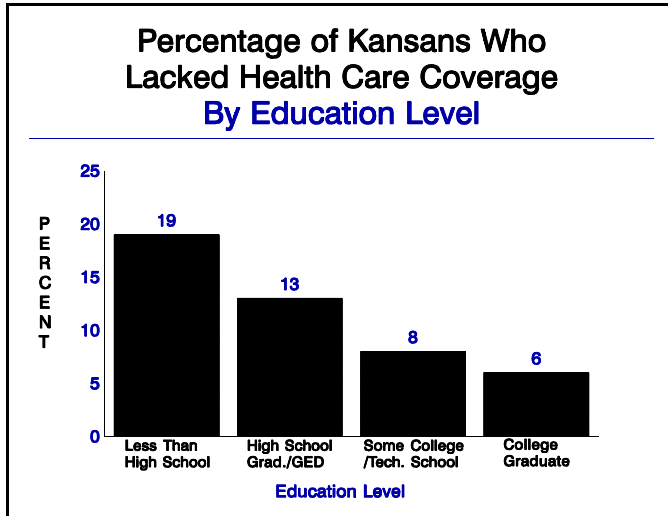


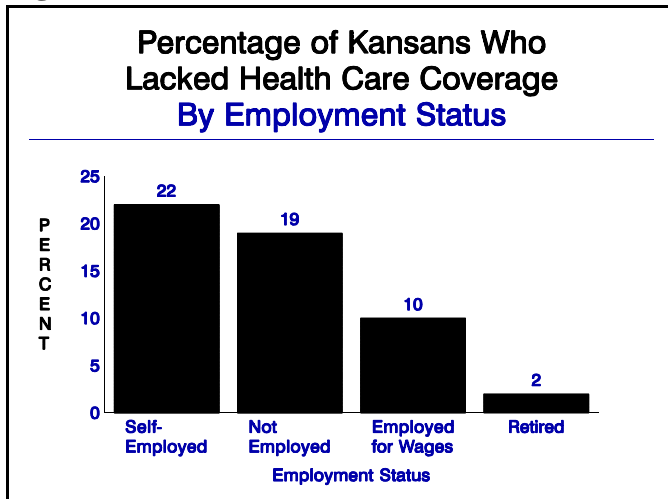
Figure 92



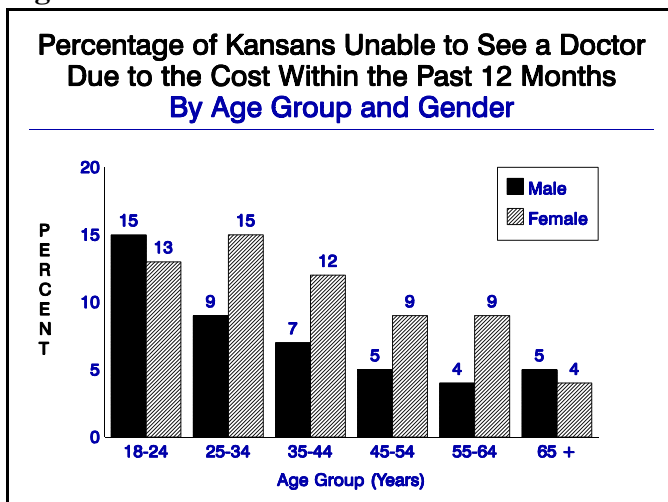
**Figure 89**



**Figure 91**



**Figure 93**



## **Usual Source of Health Care**

According to 1996 BRFSS data, 90% of respondents reported that they had a usual source of health care if they were sick or needed advice about their health. Females were more likely to report that they did not have a usual source of health care (93%) than were males (88%). The percentage of Kansans who had a usual source of health care generally increased with advancing age, rising household income, and greater educational attainment. Kansans who were self-employed, not employed for wages, never married, or a member of an unmarried couple were most likely to report that they did not have a usual source of health care coverage. The most commonly reported sources of routine health care were a doctor's office or private clinic (85%), community clinic (4%), public clinic (4%), company/school clinic (3%), and military facility (2%). Among respondents without a usual source of routine health care, the most commonly reported reasons for lacking a usual source of routine health care were: had not needed a doctor (47%), lacked insurance/could not afford (14%), previous doctor was not available (8%), had two or more places for health care (8%), did not like/trust/believe in doctors (4%), no place was available/close enough/ convenient (4%), and did not know where to go (3%).

## **Routine Check-ups**

When asked how long it had been since they last visited a doctor for a routine check-up, 72% of respondents reported they had received a routine check-up during the past year, 12% reported one to two years ago, 6% reported two to five years ago, 8% responded five or more years ago, 1% reported never having had a routine check-up, and 2% did not know how long it had been since their last check-up. Sixteen percent of respondents had not received a routine check-up within the past two years. Males reported not having received a routine check-up during the previous two years (21%) more often than females (11%). The percentage of persons who had not received a routine check-up within the past two years generally decreased with advancing age. Kansans who were married, divorced or separated, or self-employed were more likely to report that they had not received a routine check-up within the past two years.

## **Hospitalization among Kansans Aged 65 and Older**

Over a third (37%) of Kansans aged 65 and older reported that they had been admitted to a hospital during the past five years. The proportion of Kansans aged 65 and older who had been admitted to a hospital during the past five years increased with advancing age. The proportion of Kansans aged 65 and older who had been admitted to a hospital during the past five years was highest among those with household income below \$15,000 and those with some college education.

## **Kansas and the United States**

In 1996, Texas had the highest percentage of persons who reported that they lacked health care coverage (25%) and Minnesota reported the lowest proportion without health care coverage (7%). Kansas had the ninth lowest percentage of persons who lacked health care coverage. The median percentage of persons who lacked health care coverage was 13% in the United States during 1996.

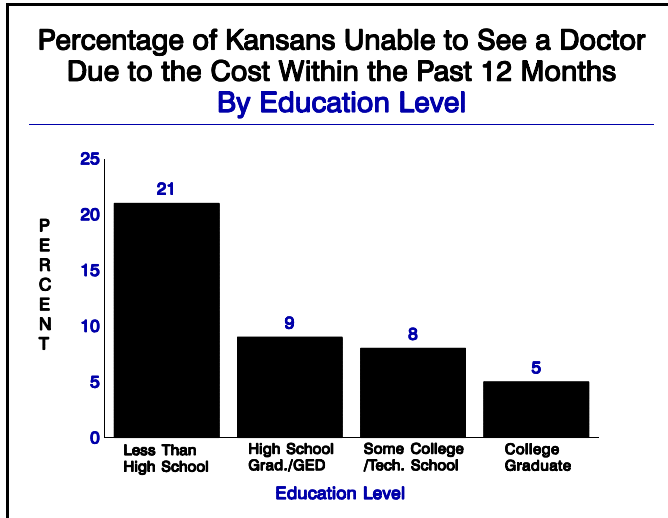
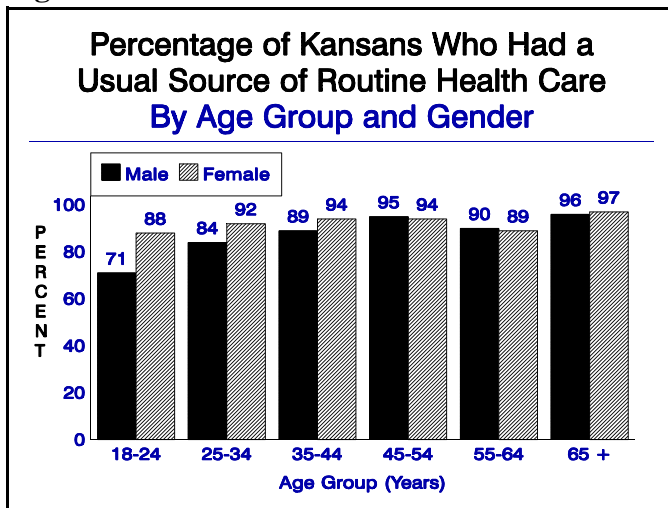
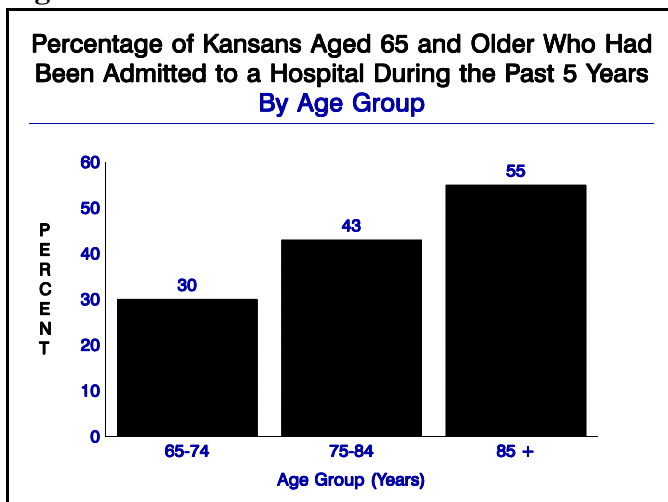
**Figure 94**

**Figure 96**

**Figure 98**


Figure 95

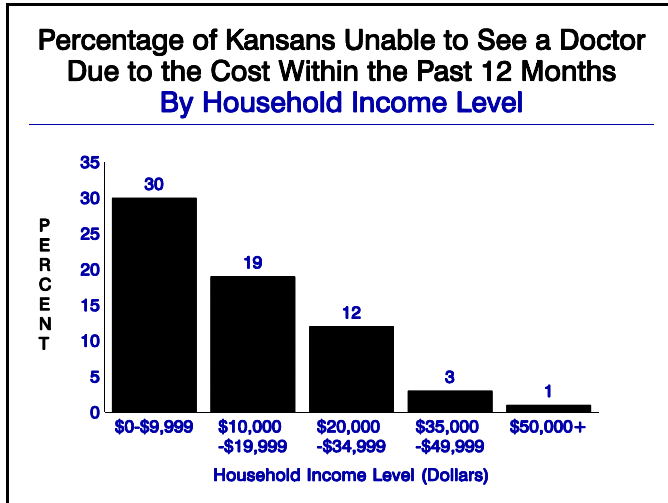


Figure 97

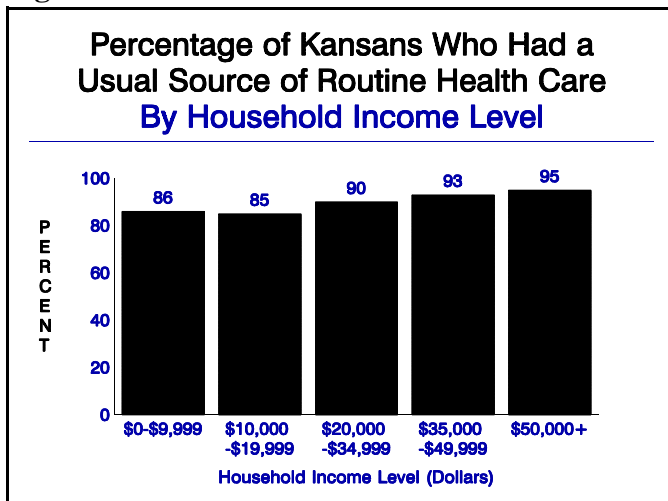
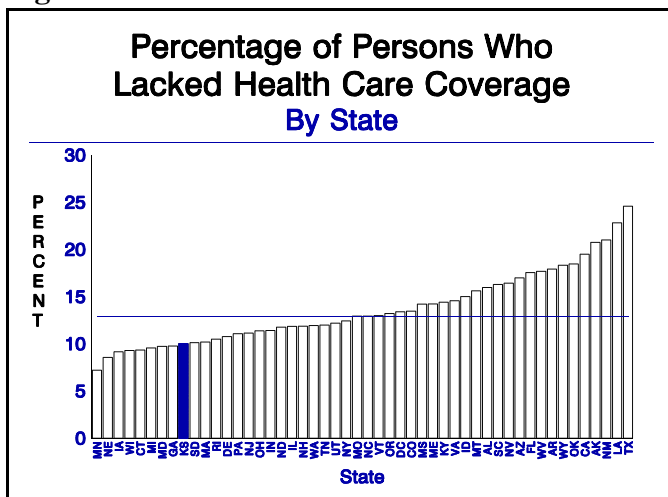
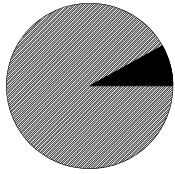


Figure 99



Violent  
Neighborhood  
At Risk 8%



**Afraid to Leave Home at Night:** *Respondents who reported they were very afraid, somewhat afraid, a little afraid to leave home at night.*

**Violent Neighborhood:** *Respondents who reported that they had seen a violent crime in their neighborhood within the last year.*

**Known Abused Partner:** *Respondents who reported that they have known or seen someone during the past year who was beaten or otherwise hurt by a spouse or partner.*

## Violence and Crime

### Background

Violence such as murder, rape, and domestic abuse takes a heavy toll on the physical and mental well being of Kansans. According to the Kansas Bureau of Investigation (KBI) from 1985 to 1994 the total crime index offenses (murder, rape, robbery, aggravated assault/battery, burglary, theft, and motor vehicle theft) increased 22% to 53.5 offenses per 1,000 persons and violent criminal offenses (murder, rape, robbery, and aggravated assault/battery) increased 26% to 4.4 violent offenses per 1,000 persons<sup>16</sup>. From 1985 to 1994 in Kansas, murder increased 20%, rape increased 41%, robbery increased 50%, aggravated assault and battery increased 17%, burglary increased 58%, theft increased 6%, and motor vehicle theft increased 50%<sup>16</sup>. Increasingly, violent crimes are being committed by juvenile offenders, with 22% of murder arrests, 16% of rape arrests, and 23% of aggravated assault and battery arrests being of juveniles, primarily males<sup>16</sup>.

### Who's At Risk Among Kansans

Nearly a third (31%) of Kansans reported that they were afraid to leave their home at night. Females were much more likely to report that they were afraid to leave the home at night (40%) than were males (21%). Kansans in the youngest age groups, who had some college education, with household incomes between \$35,000 to \$49,999, were not employed for wages, widowed, African-American, Hispanic, or living in urban counties most frequently reported being afraid to leave their home at night.

Nearly one-tenth (8%) of respondents reported that they had seen a violent crime in their neighborhood during the past year. Males and females were equally likely to have seen a violent crime in their neighborhood during the last year (8%). The proportion of Kansans who reported that they had seen a violent crime in their neighborhood during the past year decreased with advancing age and greater educational attainment. Kansans who were not employed for wages, divorced or separated, never married or a member of an unmarried couple, African-American, or Hispanic were more likely to report that they had seen a violent crime in their neighborhood during the past year.

Three-tenths (30%) of Kansans reported that they had seen or known someone who had been abused by a partner during the past year. Knowing an abused partner was more commonly reported by females (32%) than males (27%). The proportion of Kansans who reported that they had seen or known an abused partner generally decreased with advancing age and generally increased with rising household income and greater educational attainment. Kansans who were employed for wages, not employed for wages, divorced or separated, never married or a member of an unmarried couple, or Hispanic more frequently reported that they had known an abused partner.

Figure 100

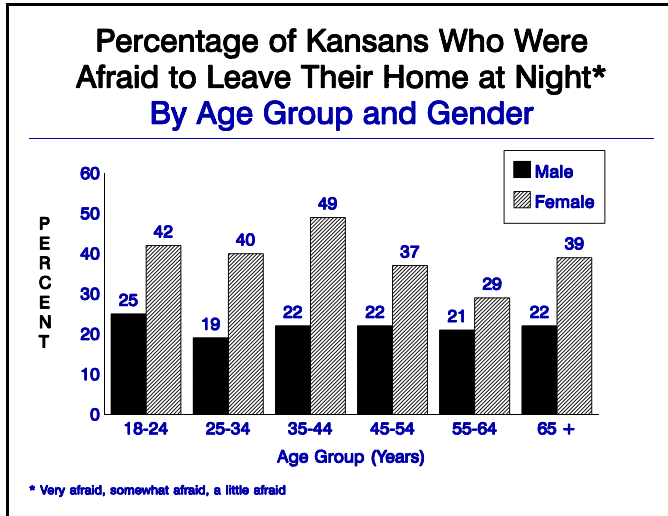


Figure 102

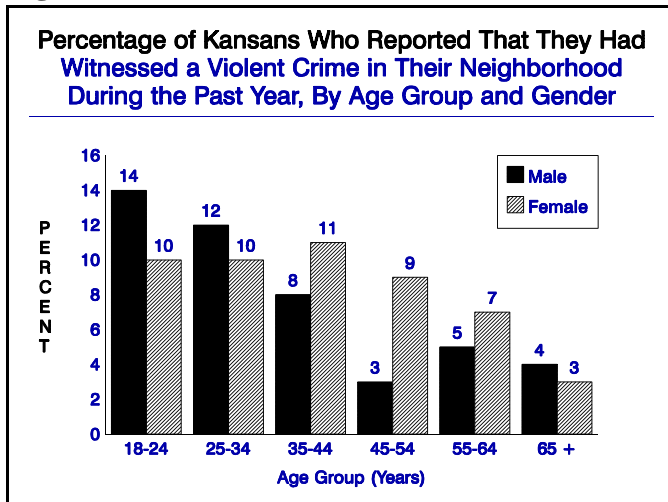
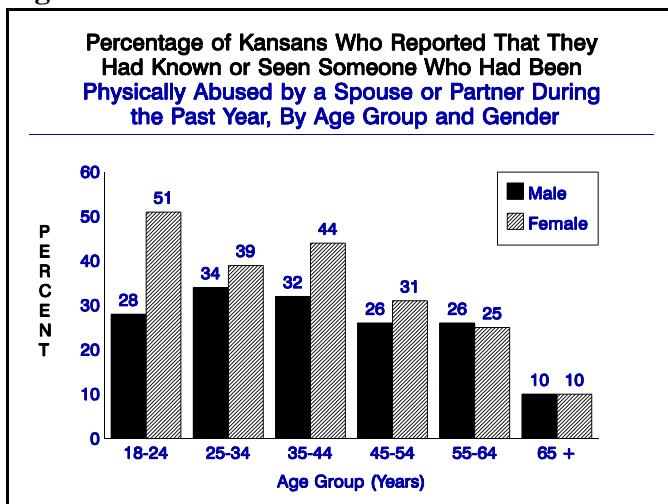
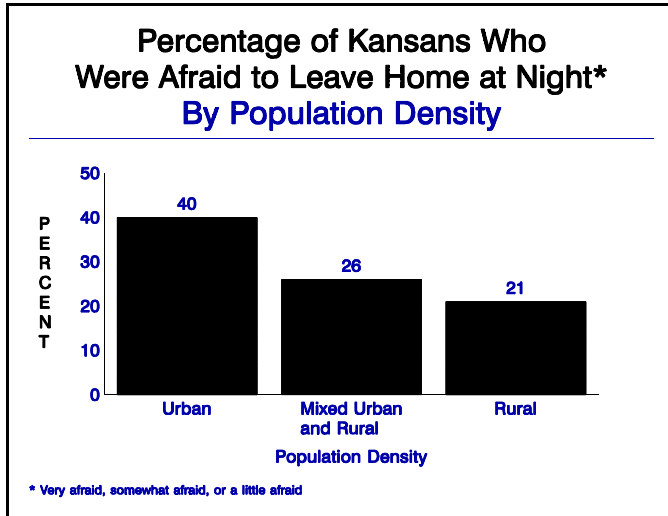


Figure 104

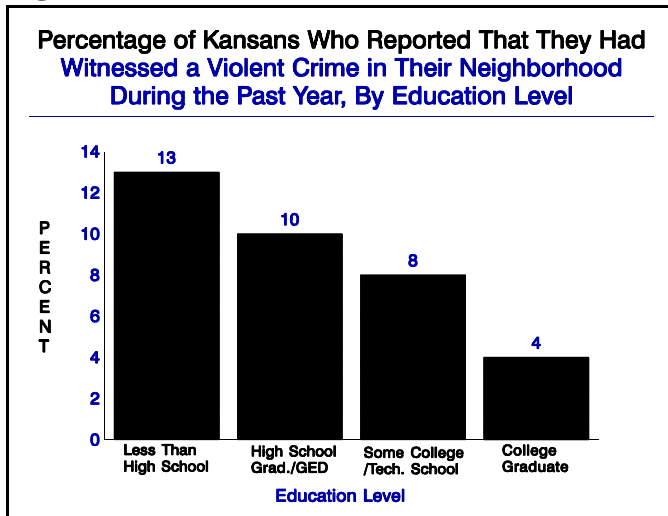




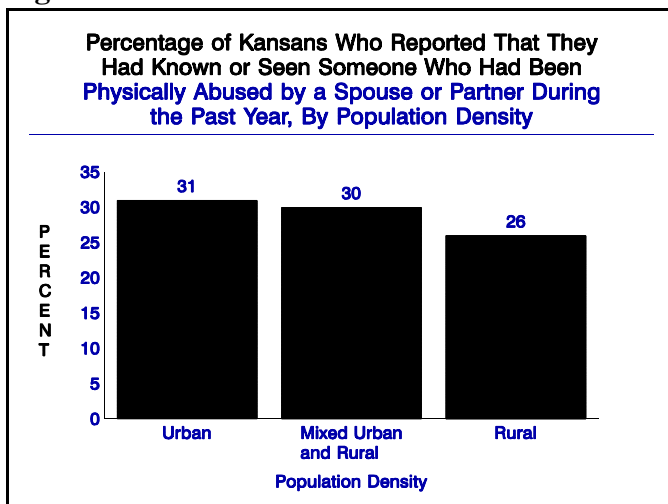
**Figure 101**



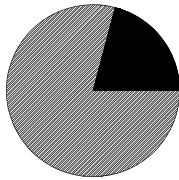
**Figure 103**



**Figure 105**



**Arthritis  
At Risk 21%**



**Arthritis:** Respondents who reported that they had ever been told by a doctor that they had arthritis.

**Joint Symptoms:** Respondents who reported that during the past 12 months that they had had pain, aching, stiffness, or swelling in or around a joint.

## Arthritis

### Background

Arthritis is a term broadly applied to conditions of joint inflammation. When chronic or persistent it is typically associated with permanent damage to joints, pain, stiffness, and loss of mobility. Although chronic arthritis is usually not preventable and joint damage is not reversible, its huge toll in disability and suffering make it an important public health issue. Joints throughout the body are susceptible to arthritis but different types of arthritis tend to affect different joints. Both the severity of the disease and the specific joints involved determine the nature and extent of disability (e.g., persons with arthritis of the hips may have great difficulty walking but no difficulty eating). Arthritis potentially affects persons of all ages, but because the most common causes are associated with advancing age, it takes its greatest toll among the elderly. Many persons with mild arthritis may have no symptoms and, hence, may be unaware that they have arthritis.

A large number of conditions have been associated with arthritis; however, not all conditions result in chronic arthritic disease or cause permanent joint damage. A few of the more common causes of arthritis include infection (e.g., septic arthritis, Lyme disease), joint damage due to injury or "wear and tear" (e.g., osteoarthritis), autoimmune diseases (e.g. lupus, rheumatoid arthritis), and crystals in joints (e.g., gout). Persons with arthritis may not know the cause of their arthritic condition, sometimes because their joint symptoms have never been clinically evaluated.

### Who's At Risk Among Kansans

A third (34%) of respondents reported that they had pain, aching, stiffness, or swelling in or around a joint during the past 12 months. Among persons who suffered joint symptoms during the past 12 months, 56% reported that the symptoms were present on most days for at least one month. Nearly a third (30%) of persons who had joint symptoms reported that they were limited in some way in an activity because of their joint symptoms. Females were more likely than males to report joint symptoms and to be limited because of joint symptoms,

**Figure 106**

**Percentage of Kansans With Joint Symptoms Who Had Joint Symptoms Present for at Least One Month By Age Group**

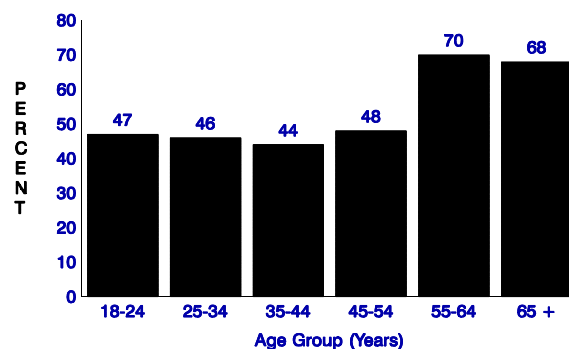


Figure 107

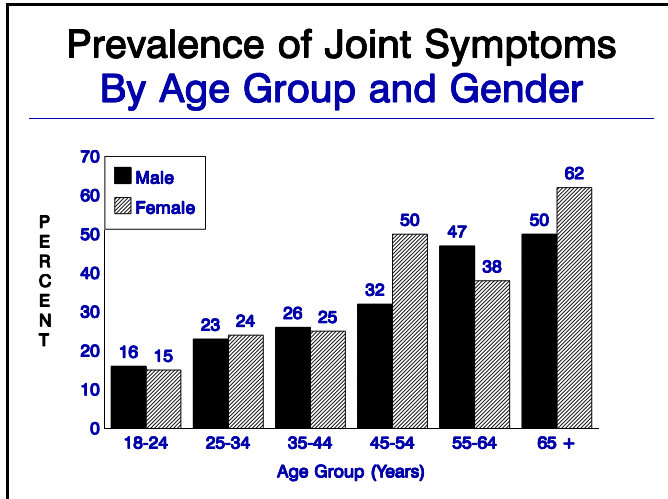


Figure 109

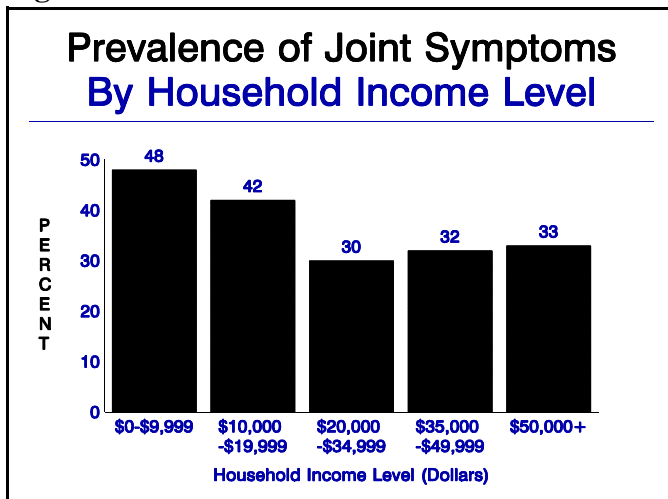


Figure 111

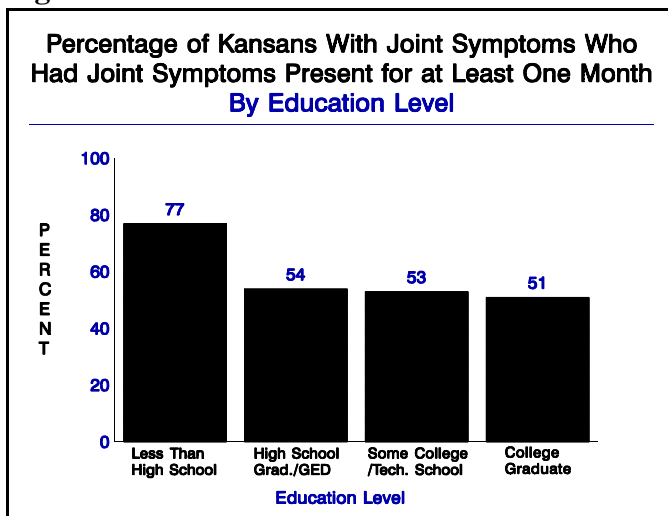


Figure 108

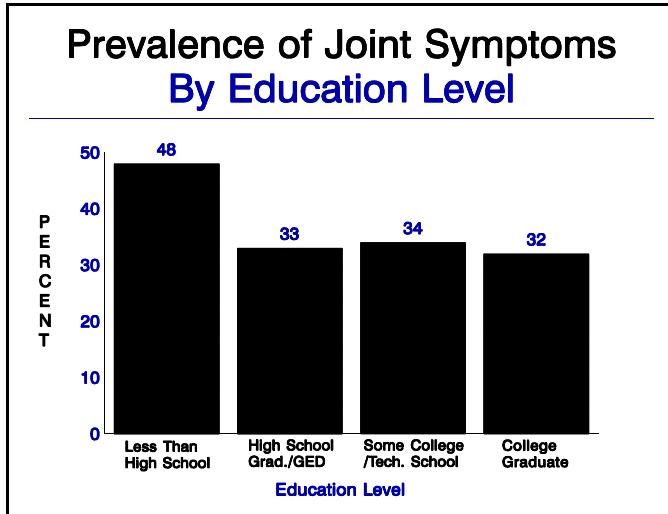


Figure 110

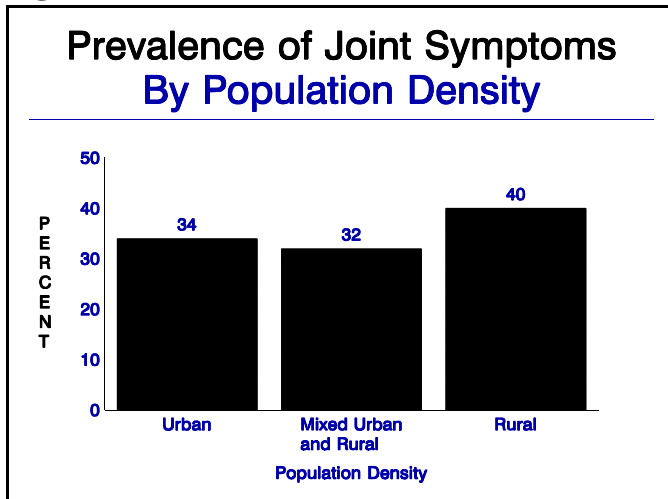
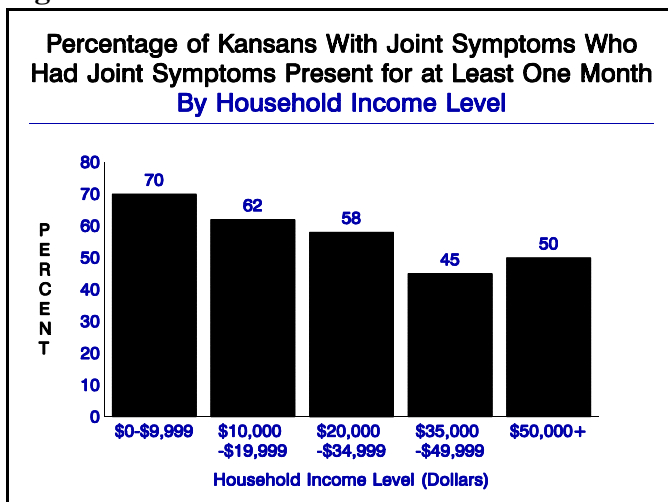


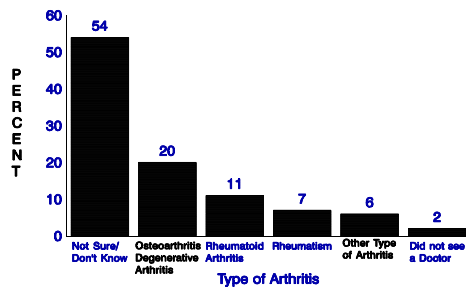
Figure 112



while males were more likely to reported sustained joint symptoms. The percentage of respondents who had joint symptoms, suffered sustained symptoms, and were limited because of their joint symptoms increased with advancing age, and were most common among Kansans with less than a high school education or household incomes below \$20,000.

**Figure 114**

**Type of Arthritis Kansans Reported Their Doctor Told Them They Had**



Over a fifth (21%) of respondents reported that they had been told by a doctor that they had arthritis. The prevalence of arthritis was higher among females (25%) than males (17%). The prevalence of arthritis increased with advancing age and generally decreased with rising household income and greater educational attainment. Among Kansans with arthritis, 54% of respondents reported that they did not know what kind of arthritis they had, 20% had osteoarthritis/degenerative arthritis, 11% had rheumatoid arthritis, 7% had rheumatism, 6% had some other type of arthritis, and 2% said they had not seen a doctor. Less than a third (31%) of persons who had arthritis reported that they were currently being treated by a doctor for arthritis.

**Figure 113**

**Percentage of Kansans With Joint Symptoms Who Were Limited in Any Activity Due to Joint Symptoms By Age Group**

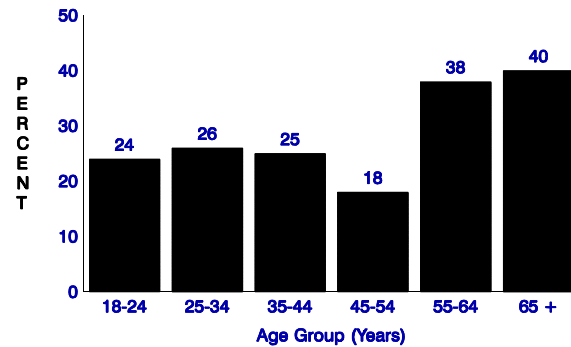


Figure 115

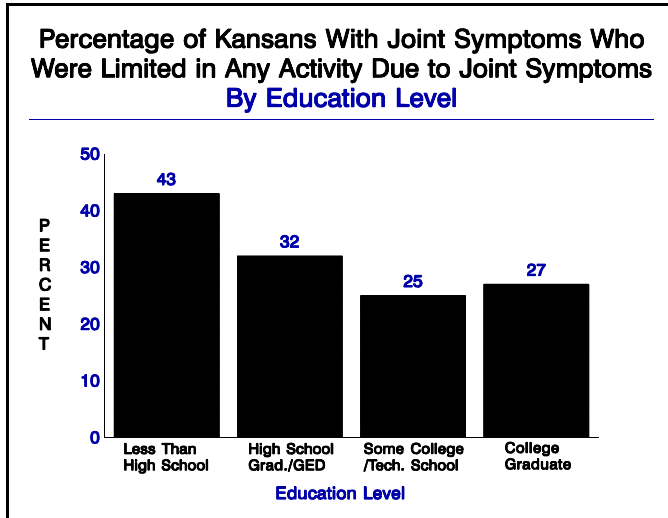


Figure 117

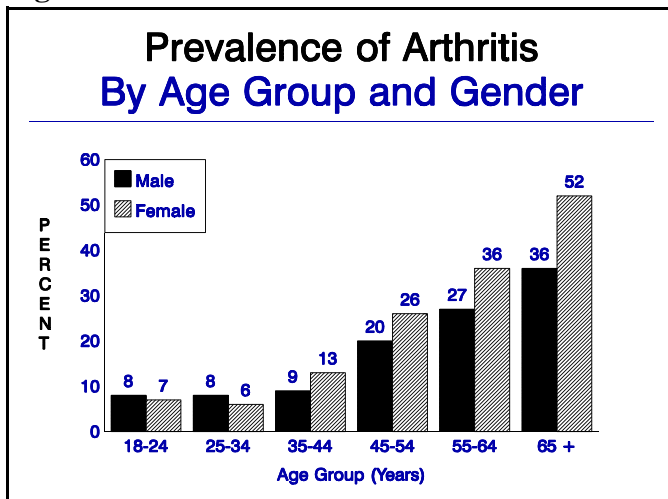
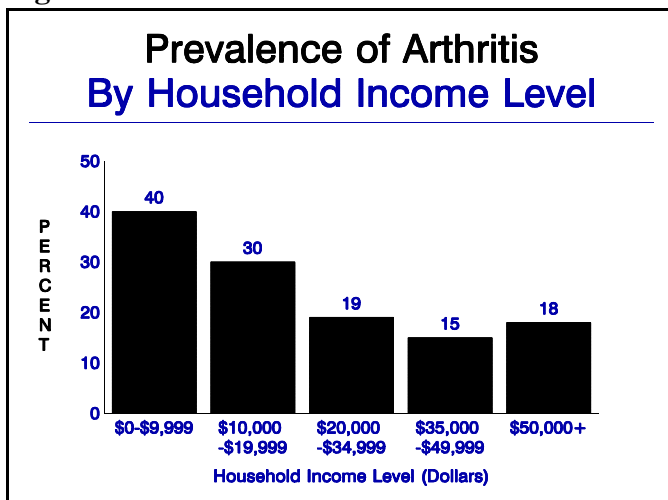
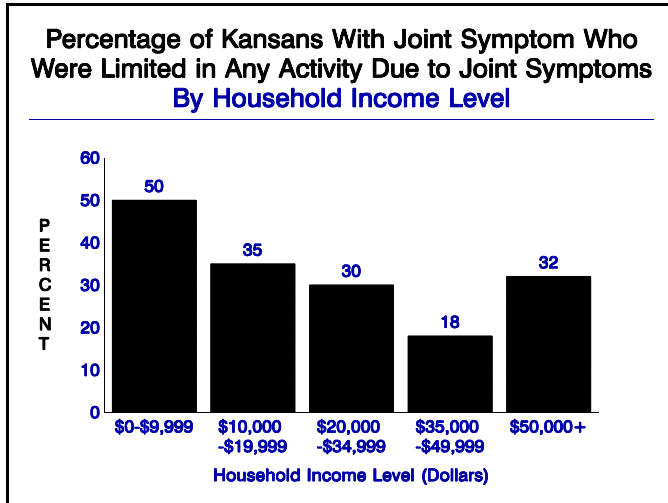


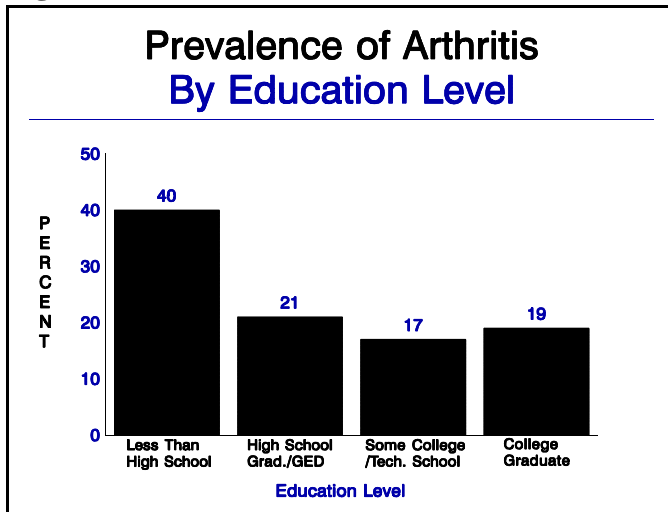
Figure 119



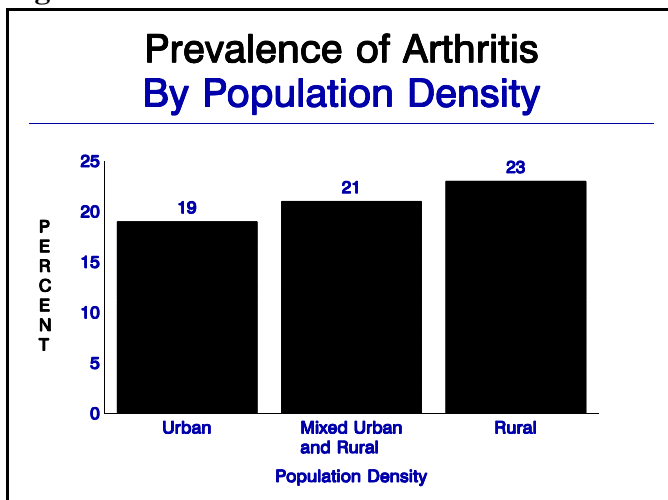
**Figure 116**



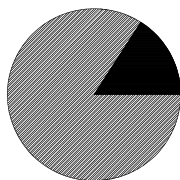
**Figure 118**



**Figure 120**



**Falls  
At Risk 16%**



**Falls:** Respondents aged 65 and older who reported that they had fallen during the past twelve months.

## Falls

### Background

In the United States each year approximately 11,000 deaths are attributed to falls and the majority of these falls occur in the home<sup>17</sup>. One person in 20 receives emergency room treatment due to a fall each year and falls are the leading cause of non-fatal injuries and of hospital admissions for trauma<sup>17</sup>. Falls are particularly devastating for older persons. Falls are the sixth leading cause of death for older persons<sup>18</sup> and of all fall deaths, 59% occur among persons aged 75 and older<sup>17</sup>. Additionally, falls are a contributing factor in 40% of nursing home admissions<sup>18</sup>. Eighty-seven percent of fractures among older persons are caused by falls<sup>62</sup>. Hip fractures are the greatest cause of morbidity and mortality of all fractures caused by falls and the death rate for hip fracture patients in the first year following the injury is 12-20% higher than for similar persons who had not suffered a fracture. Half of older persons hospitalized for hip fractures cannot return home or live independently afterwards<sup>19</sup>.

Individual risk factors for falls include dementia, visual problems, neurologic and musculoskeletal impairment, use of psychoactive medications, and difficulties with gait and balance. Environmental hazards include slippery surfaces, uneven floors, poor lighting, loose rugs, unstable furniture, and tripping hazards<sup>19</sup>. Strategies to reduce the risk of falling include: 1) engaging in physical activity to improve strength, mobility, and flexibility; 2) adequate medical supervision to minimize the use of psychoactive medication and maximize control of medical conditions; and 3) environmental modifications such as installing grab bars and removal of tripping hazards<sup>19</sup>.

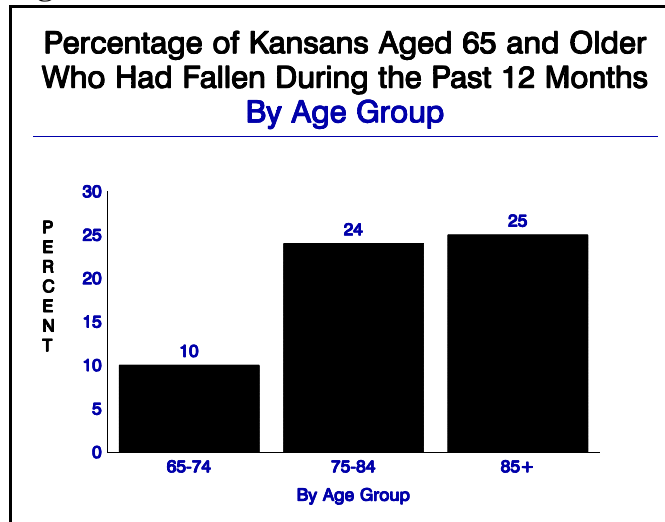
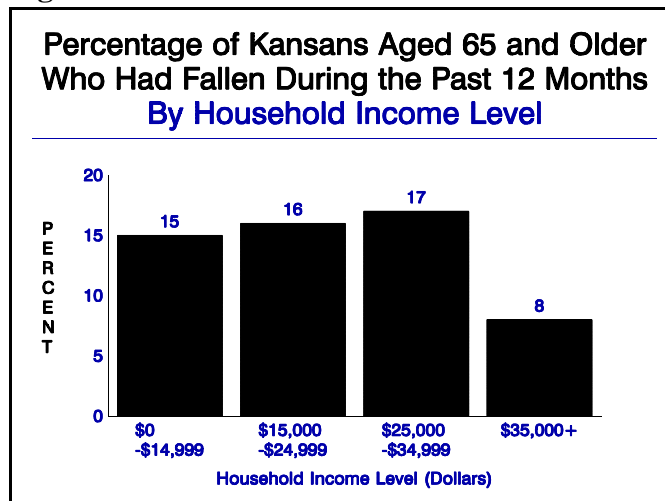
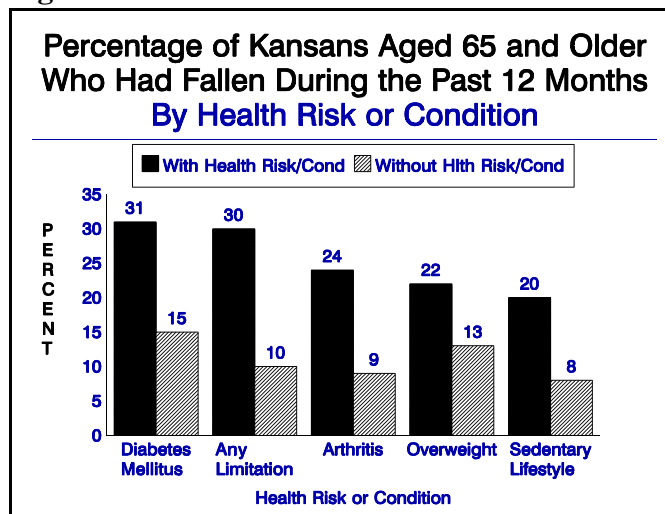
### Who's At Risk Among Older Kansans

Among respondents aged 65 and older, 16% reported that they had fallen during the past 12 months. Males reported that they had fallen during the last 12 months (17%) only slightly more often than females (15%). The percentage of Kansans aged 65 and older who reported that they had fallen during the past 12 months increased with advancing age.

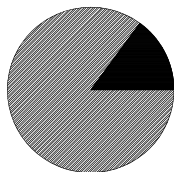
### Characteristics of Older Kansans Who Had Fallen

Among Kansans aged 65 and older who had fallen during the past twelve months, 21% reported that they had seen a doctor or nurse because they were injured when they fell. Among Kansans aged 65 and older, 24% of persons who had arthritis reported they had fallen compared to only 9% who did not have arthritis. Nearly a third (30%) of Kansans aged 65 and older who had an activity limitation reported they had fallen, while only 10% of persons without an activity limitation had fallen. Older Kansans who were sedentary were more likely to report that they had fallen (20%) than those who were not sedentary (8%). Those older Kansans who reported being overweight more frequently reported that they had fallen (22%) than those who were not overweight (13%). Older Kansans who had diabetes more often reported they had fallen (31%) than those who did not have diabetes (15%).



**Figure 121**

**Figure 122**

**Figure 123**


Any Activity  
Limitation  
At Risk 15%



**Any Activity Limitation:** Respondents who reported they were limited in any way in an activity due to an impairment or health problem.

**Routine Care Limitations:** Respondents who reported they needed help with routine care needs such as everyday household chores, doing necessary business, shopping, or getting around for other purposes.

**Personal Care Limitations:** Respondents who reported they needed help with personal care needs such as eating, bathing, dressing, or getting around the house.

## Activity Limitations

### Background

Activity limitation refers to a person's inability to perform activities such as, but not limited to, work, school, recreation, or various activities of daily living such as eating, dressing, cleaning, or shopping. Approximately 33 million Americans have physical or mental impairments that limit their activities, and more than 7.6 million are estimated to need help with either routine and/or personal care needs<sup>8</sup>. Persons with severe routine and personal care limitations are at greater risk of being institutionalized, especially when there is an absence of a spouse or other family member to help with health and maintenance needs<sup>8</sup>.

### Who's At Risk Among Kansans

One-seventh (15%) of Kansans reported being limited in any way in an activity due to an impairment or health problem. Females were slightly more likely to report that they had any activity limitation (16%) than males (13%). The prevalence of any activity limitation increased with advancing age and generally decreased with rising household income and greater educational attainment. Respondents who were retired, not employed for wages, widowed, or were living in rural counties more frequently reported having any activity limitation.

Respondents aged 65 and older were asked two additional questions to assess routine care and personal care limitations. Among Kansans aged 65 and older, 16% reported routine care limitations and 6% reported personal care limitations. The prevalence of routine care and personal care limitations among persons aged 65 and older, increased with advancing age and generally decreased with rising household income and higher levels of education.

### Characteristics of Kansans With Activity Limitations

The most commonly reported major impairments or health problems that resulted in activity limitation were arthritis/rheumatism (22%), back or neck injury (14%), fractures, bone, or joint injury (13%), walking problem (13%), lung/breathing problem (8%), heart problem (8%), and eye/vision problem (4%). Among persons with any activity limitation, 35% indicated that they considered themselves to be a person with a disability. Among persons believed that they had a disability, 57% reported that a doctor or other health professional had given them information about community or self-help resources to help manage their condition.

Figure 124

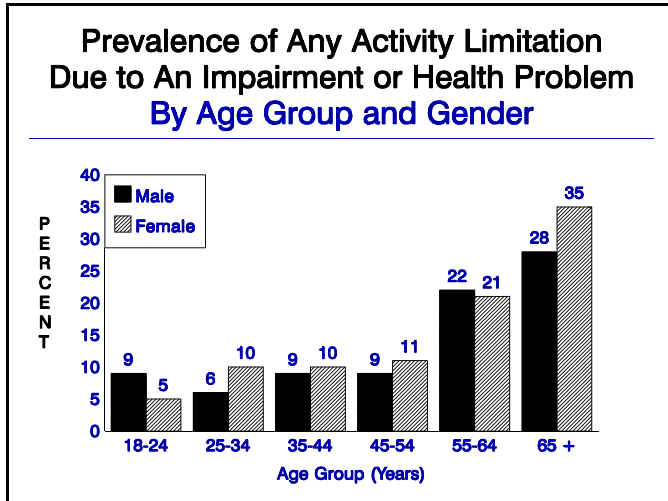


Figure 126

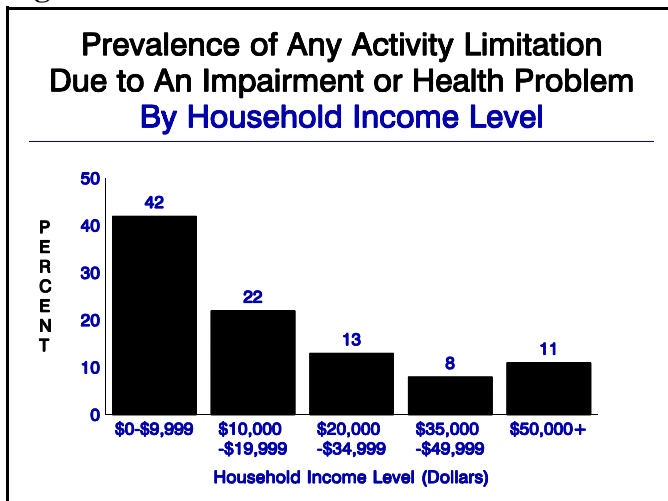


Figure 128

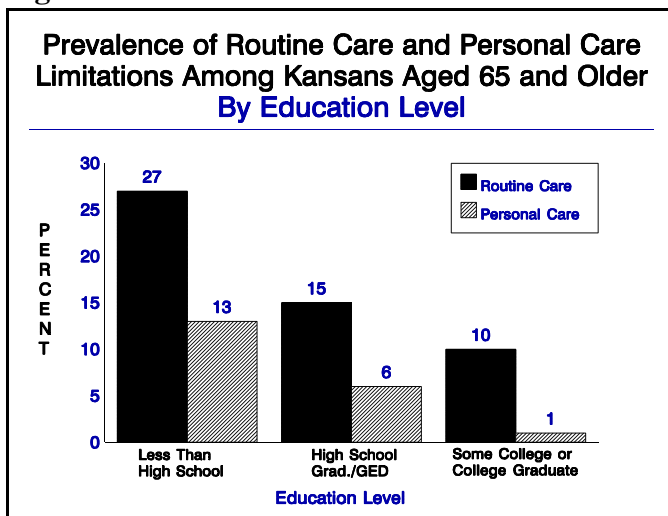


Figure 125

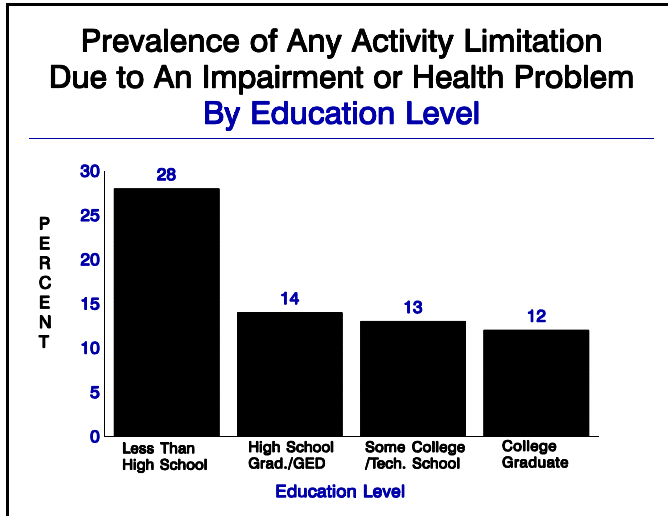


Figure 127

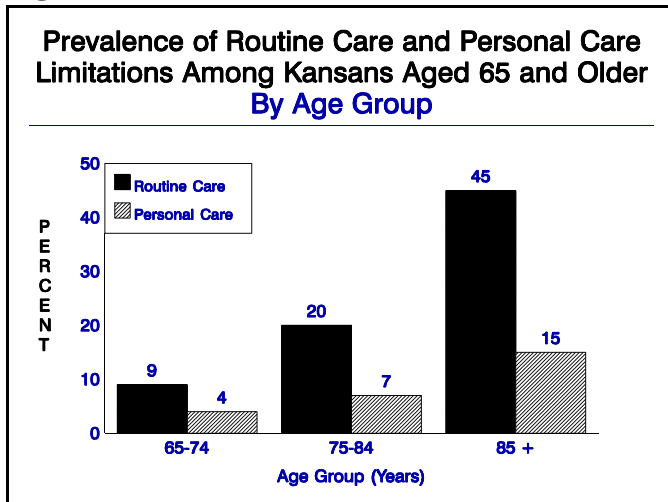
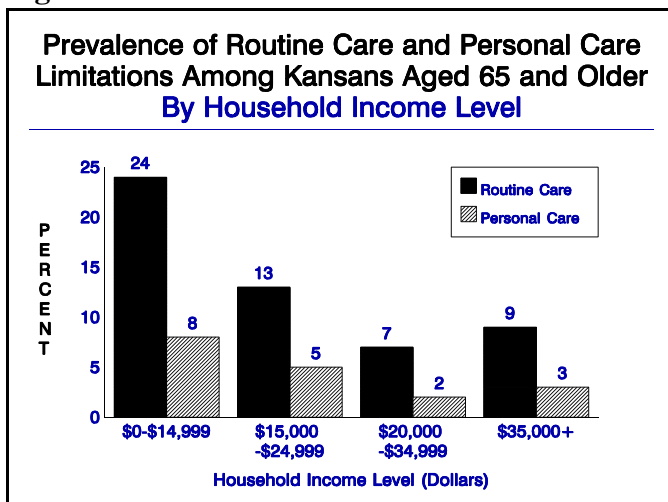
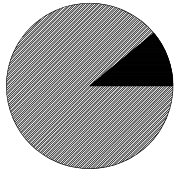


Figure 129



Lack Working  
Smoke Detector  
At Risk 11%



**Lack Working Smoke Detector:** *Respondents who reported that they did not have an installed and working smoke detector in their home.*

## Fire Safety

### Background

In the United States residential fires are the 4th leading cause of unintentional injury deaths and the 2nd leading cause of injury death in the home<sup>20</sup>. In 1996, Kansas experienced 4,056 residential structure fires which resulted in 34 civilian deaths and 196 civilian injuries; additionally, 171 firefighters were injured while fighting these fires<sup>21</sup>. Nationally, house fires cause 75% of all deaths from fires and burns, with young children and the elderly at greatest risk<sup>22</sup>. Fire-related injuries are very costly, causing tremendous pain and suffering, high medical care costs, and lost productivity. Smoke detectors are a reliable, inexpensive way of providing early warning of house fires which reduces the potential of death and severe injury by more than 85%<sup>22</sup>. In Kansas during 1996, 67% of homes that had fires did not have a working smoke detector and 81% of deaths occurred in homes without a working smoke detector<sup>21</sup>. It is vital that battery operated smoke detectors be checked periodically to make sure the batteries are good and the detector is functioning properly. Dead batteries are the most common cause of detector failure; one study of fatal house fires and smoke detectors found that dead batteries were to blame in two-thirds of the instances of detector failure<sup>8</sup>. It is recommended that you check your smoke detector monthly and replace detector batteries every 6 months.

### Who's At Risk Among Kansans

A tenth (11%) of respondents reported that they did not have an installed and working smoke detector in their household. Females were slightly more likely to report that they did not have a working smoke detector (11%) than males (10%). The percentage of respondents who reported that they lacked a working smoke detector increased slightly with advancing age and decreased with rising household income and higher levels of education. Kansans who were self-employed, divorced or separated, or living in a rural county were most likely to report that they did not have a working smoke detector.

Five percent of respondents reported that during the past 15 years there had been a fire in their home which caused smoke or burn damage to their home. In 2% of these fires the respondent and/or another person suffered burns or injuries as a result of the fire. The most commonly reported causes of the fires were: electrical/appliance (35%), cooking (29%), children playing (7%), heating unit (6%), chimney (4%), flammable materials (3%), and smoking (2%).

Figure 130

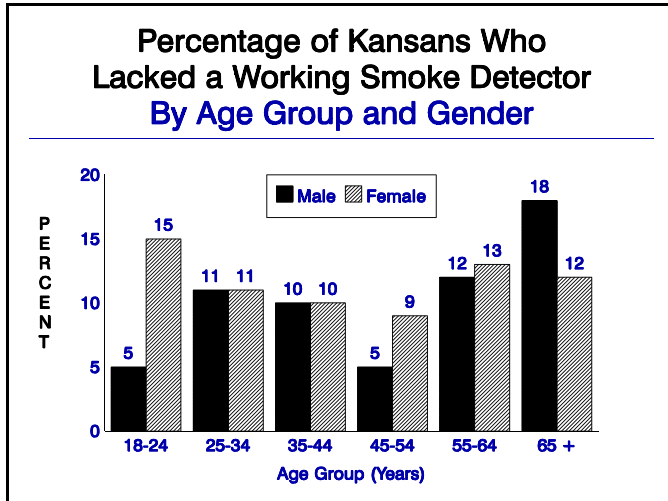


Figure 132

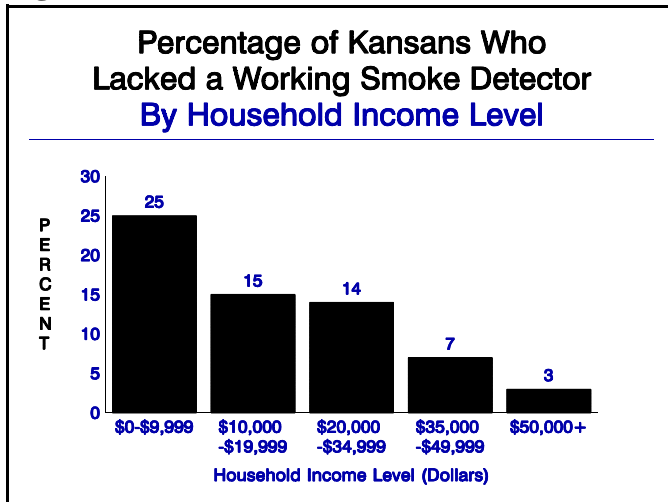


Figure 134

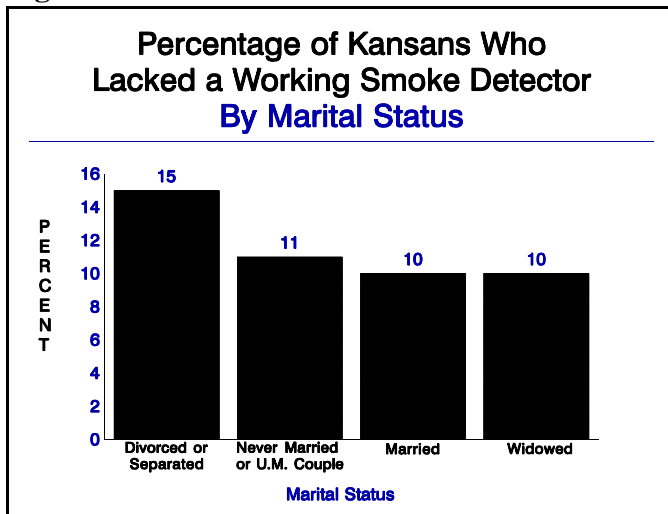


Figure 131

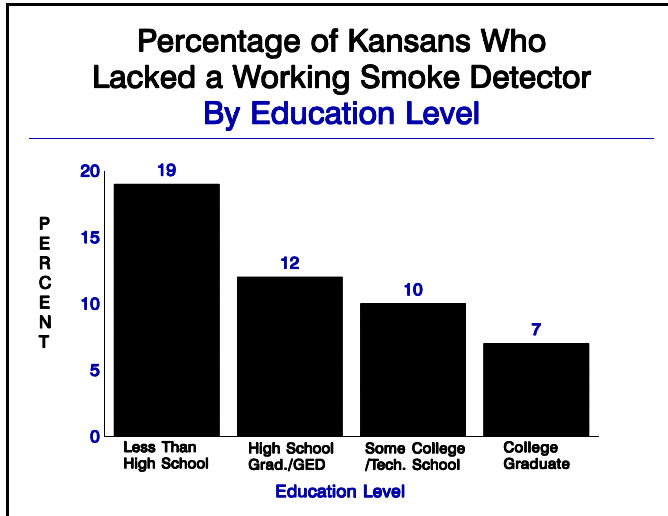


Figure 133

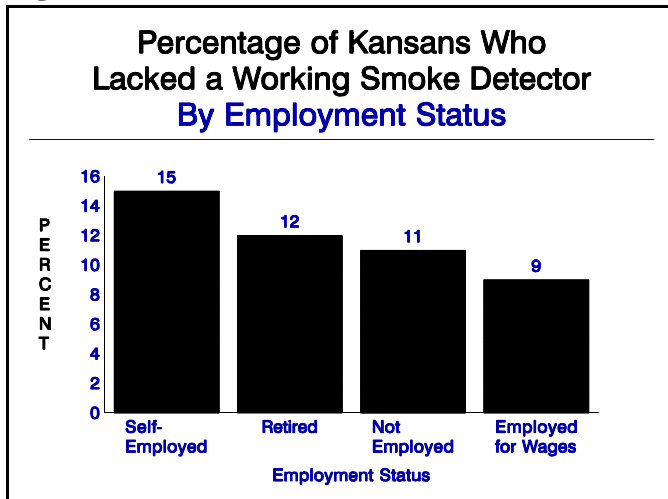
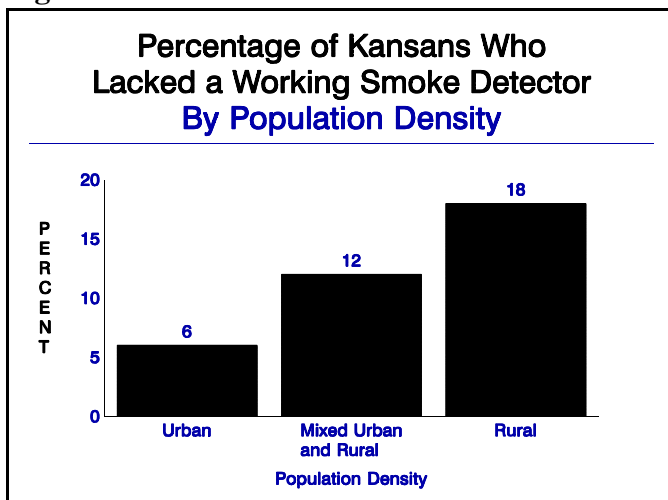
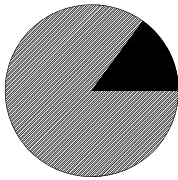


Figure 135



**Need Dental Work  
At Risk 15%**



**Lack a Recent Dental Visit:** Respondents who reported that they had not visited a dentist or dental clinic in the last year.

**Need Dental Work:** Respondents who reported that they need dental services such as fillings, dentures or partials, teeth pulled, caps, crowns, or root canal.

**Lack Dental Coverage:** Respondents who reported that they did not have any kind of insurance coverage that pays for some or all of their routine dental care including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid.

## Dental Health

### Background

Dental disease is one of the most common health problems in the United States and most adults will have dental health problems at some point in their lives. According to the last national survey (1986-1987), only 50% of children age 5 to 17 were completely free of decay and restorations in their permanent teeth and the average adult has 10 to 17 decayed, missing, or filled permanent teeth<sup>23</sup>. Approximately 50% of all adults have gingivitis (gum inflammation) and 80% have experienced some degree of periodontitis (inflammation of the gums causing the destruction of the bone that supports the teeth, leading to tooth loss)<sup>23</sup>. Among U.S. adults over age 45, 22% have none of their natural teeth remaining and over half of adults over age 65 have lost all their natural teeth<sup>23</sup>. Because dental disease is often irreversible, prevention is extremely important. The American Dental Association recommends that adults should see a dentist for routine dental care and oral hygiene counseling at least once a year. To help prevent dental disease a person should brush and floss their teeth daily, and make sure to get adequate calcium and fluoride.

### Who's at Risk Among Kansans

A third (32%) of respondents reported that they had not seen a dentist during the last year. Males and females reported roughly the same percentage of persons who had not visited the dentist during the last year (males: 31%; females: 33%). The percentage of respondents who had not seen a dentist during the past year generally decreased with advancing age, rising household income, and greater educational attainment. Kansans who were Hispanic, African-American, living in a rural county, divorced, separated, never married, or a member of an unmarried couple more commonly reported that they had not visited a dentist during the last year. The most common reasons for not seeing a dentist during the past year were: no reason to go such as no problem or no teeth (49%), cost (23%), fear, apprehension, nervousness, pain, or dislike of going (10%), had not thought of it (6%), and other priorities (5%).

**Figure 136**

**Percentage of Kansans Who Had Not Had Any  
Teeth Removed Due to Tooth Decay or Gum Disease  
By Age Group**

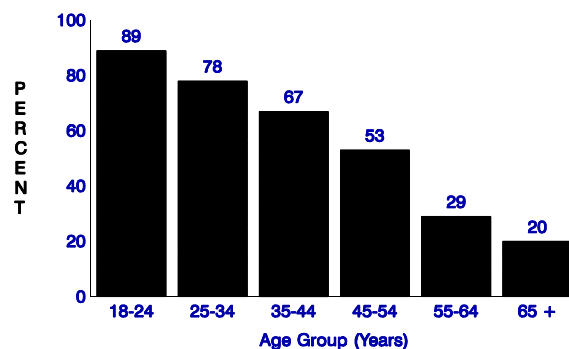




Figure 137

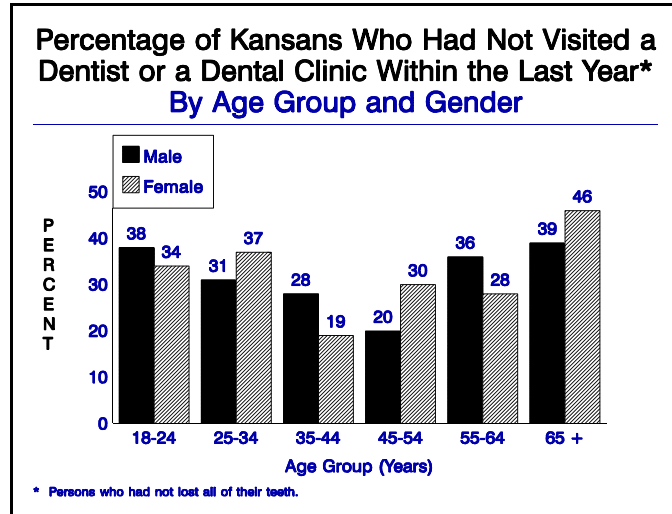


Figure 139

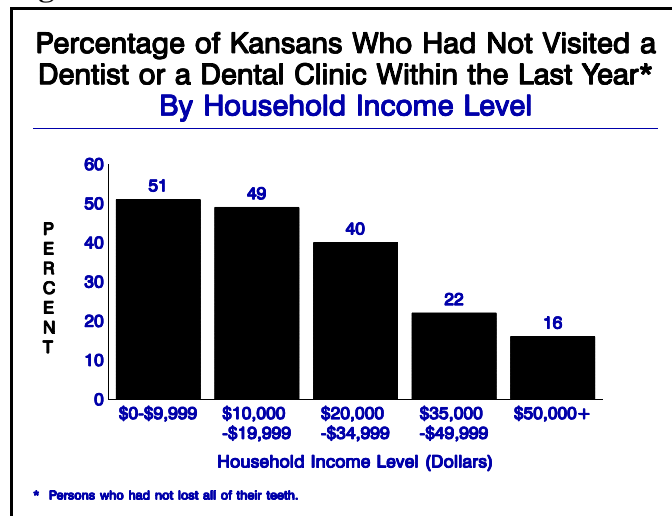


Figure 141

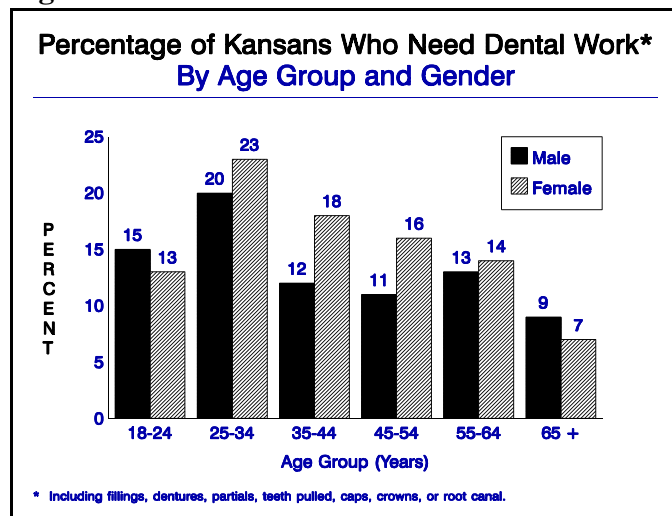


Figure 138

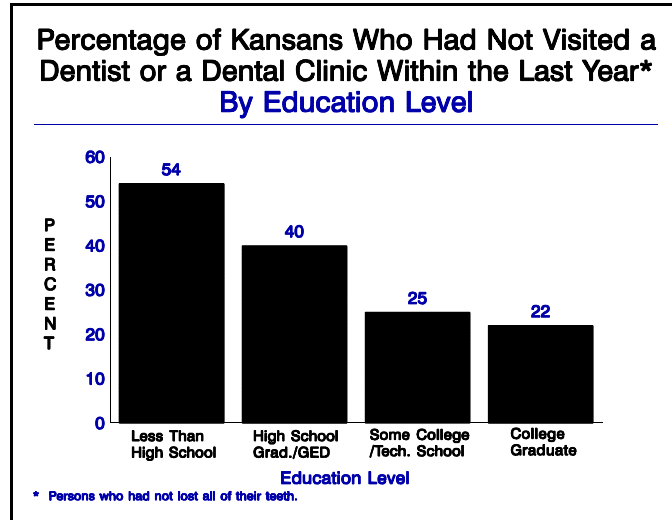


Figure 140

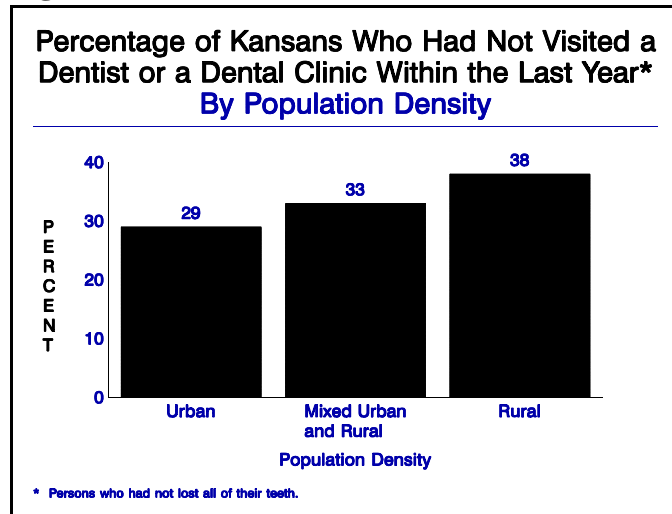
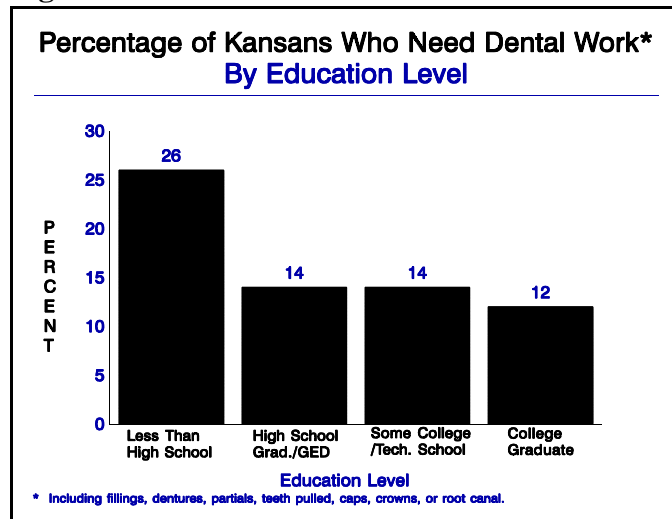


Figure 142



Nearly three-fifths (57%) of respondents reported that none of their permanent teeth had been removed because of tooth decay or gum disease, 24% reported that one to five of their teeth had been removed due to decay or disease, 10% reported that at least six but not all of their teeth had been removed, and 10% reported that all of their teeth had been removed due to tooth decay or gum disease.

When asked if they need any dental services such as fillings, dentures or partials, teeth pulled, crowns, or root canal, 15% of respondents reported that they need some kind of dental work. The percentage of respondents who needed dental work decreased with advancing age, rising household income, and greater levels of education. Respondents who were not employed for wages, divorced or separated were most likely to report that they needed dental services. Among Kansans who needed dental work, 56% needed tooth restoration work such as fillings, caps or crowns, or root canal, 28% needed rehabilitative services such as teeth pulled, dentures, or partials, and 16% needed both tooth restoration work and rehabilitative services.

### Dental Coverage

Two-fifths (42%) of respondents reported that they lacked any kind of insurance coverage that paid for some or all of their routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid. The percentage of persons who lacked dental coverage decreased with rising household income and higher levels of education. Kansans who were aged 65 and older, self-employed, retired, widowed, or living in a rural county more frequently reported that they lacked dental coverage. Kansans without dental coverage were more likely to report lacking a recent dental visit (50%) than Kansans with dental coverage (19%). Kansans without dental coverage were also more likely to report needing dental work (19%) than Kansans with dental coverage (11%).

### Kansas and the United States

Twenty states asked questions relating to dental health in 1996. Among those twenty states, Connecticut had the highest proportion of persons who had visited a dentist or a dental clinic within the past year (77%), while Oklahoma reported the lowest proportion of persons who had visited a dentist or dental clinic within the past year (60%). Kansas had the eighth lowest proportion of persons who had visited a dentist or dental clinic within the past year. The median proportion of persons who had visited a dentist or dental clinic within the past year among the 20 states was 70% in 1996.

**Figure 143**

**Percentage of Persons Who Had Visited a Dentist or Dental Clinic Within the Past Year By State**

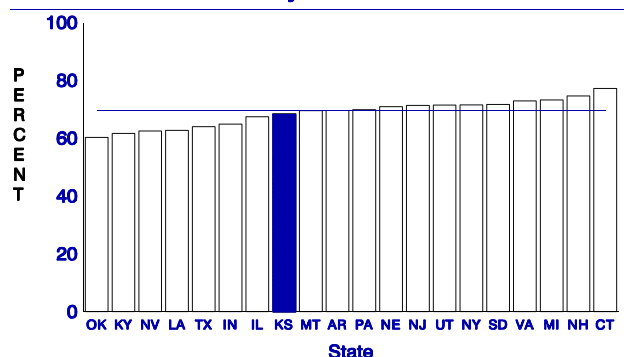


Figure 144

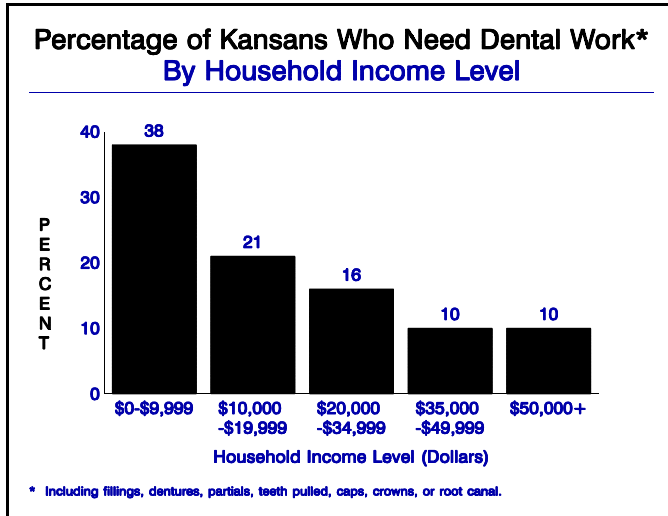


Figure 146

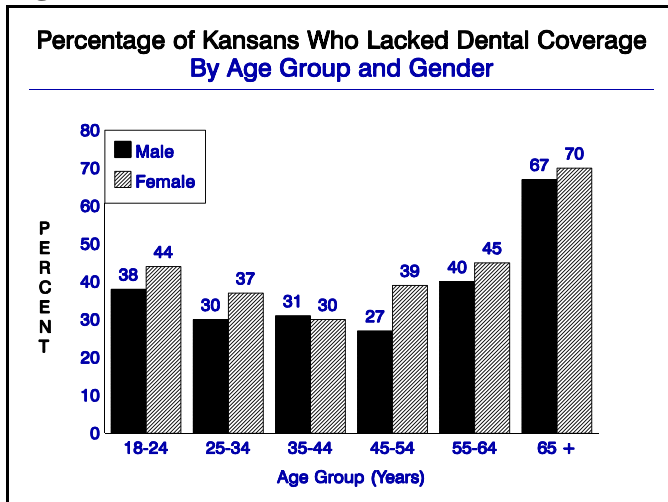
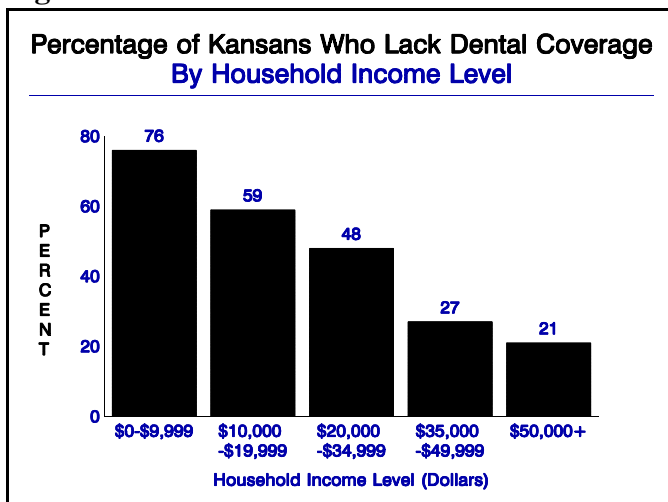
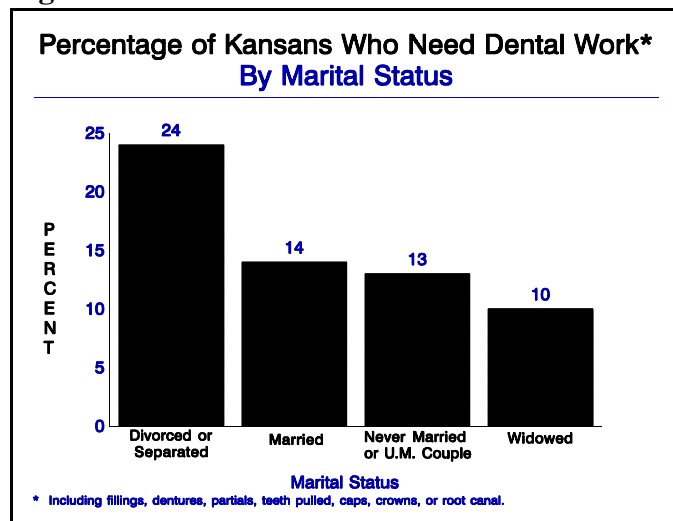
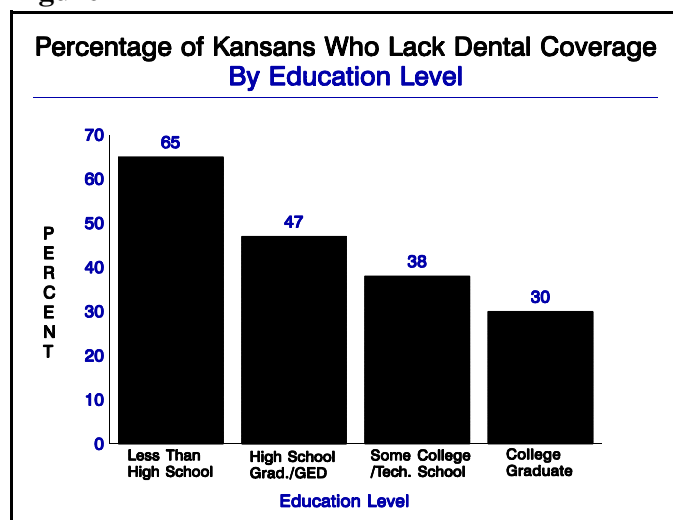
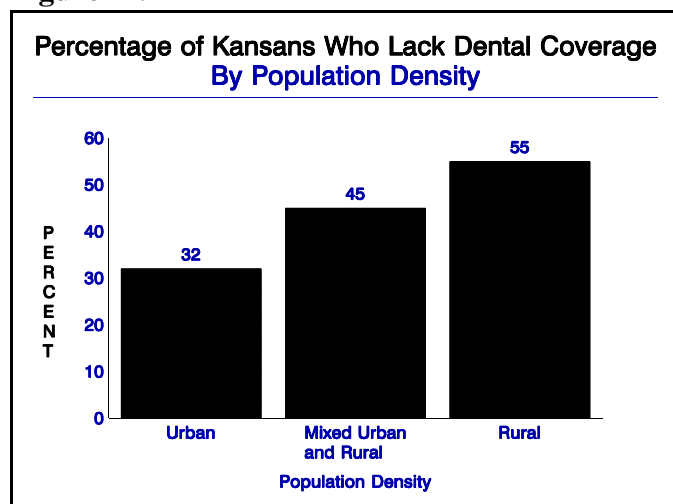


Figure 148



**Figure 145**

**Figure 147**

**Figure 149**


## Preventive Counseling

### Background

Before a person will change a behavior which affects their health, several things must occur including gaining an awareness of the problem and its consequences, accepting the necessity of change, and deciding and committing to change. Current evidence suggests that health care providers, especially physicians, play an important role in helping to bring about behavior changes that impact health. A health care provider is likely to be perceived by the patient as a person who both cares about their personal health and as an authoritative source of information about the patient's personal risk of disease. A health care provider may be able to recognize hidden health risks (e.g., heavy alcohol use, risky sexual behavior), counsel the patient about behavior change, and help the patient make a commitment to change<sup>23</sup>.

An important role for preventive counseling has been identified for a variety of conditions including alcohol use, diet, cholesterol management, HIV and other sexually transmitted diseases, injuries, physical activity, tobacco use, and pregnancy<sup>8</sup>. Available data has consistently demonstrated that preventive counseling is underutilized by health care providers as a way of improving the health of their patients. However, obtaining accurate data has been difficult since preventive counseling is frequently neither documented in the medical record nor reimbursed by second party payers.

### Who's At Risk Among Kansans

One-fifth (21%) of respondents reported that they had ever received counseling about their diet or eating habits from a doctor or other health professional. Among respondents who reported visiting a doctor for a routine checkup during the last year, 13% reported receiving counseling from a doctor or other health professional during the last year about their diet or eating habits. About one-third (35%) of respondents who were overweight based on BMI and nearly half (46%) of respondents with diabetes reported ever having been counseled about their diet and eating habits.

One-fifth (21%) of respondents reported that they had ever received counseling from a doctor or other health professional about physical activity or exercise. Among those respondents who had visited a doctor for a routine checkup within the past year, 14% reported they had received counseling about physical activity or exercise in the last year. About one-third (35%) of overweight respondents, 46% of respondents with diabetes, and 19% of respondents with sedentary lifestyles reported that they had ever received counseling about physical activity and exercise.

A tenth (10%) of respondents reported ever receiving counseling from a doctor or other health professional about injury prevention such as safety belt use, helmet use, or smoke detectors. Less than a tenth (8%) of respondents reported ever receiving counseling about alcohol use and approximately one in sixteen respondents (7%) reported ever receiving counseling regarding drug abuse. Two-thirds (66%) of current smokers reported that they had ever received counseling from a doctor or other health professional about quitting smoking. Among respondents aged 18 to 64, 18% reported they had ever been counseled about their sexual practices, including family planning, sexually transmitted diseases, AIDS, or the use of condoms by a doctor or health professional, and 27% of those at self-reported risk for HIV reported receiving counselling.

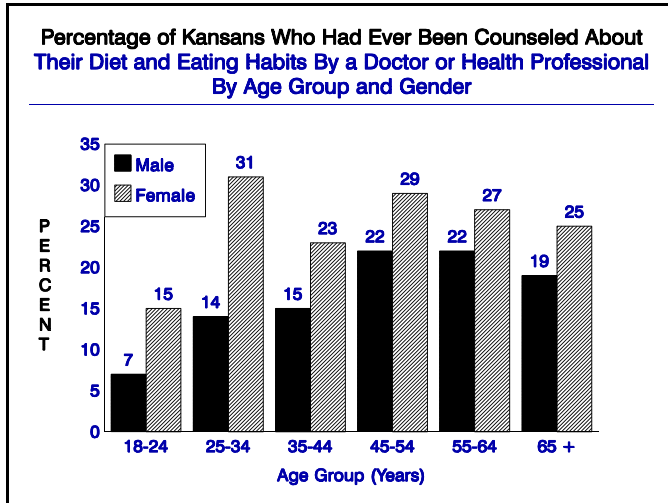
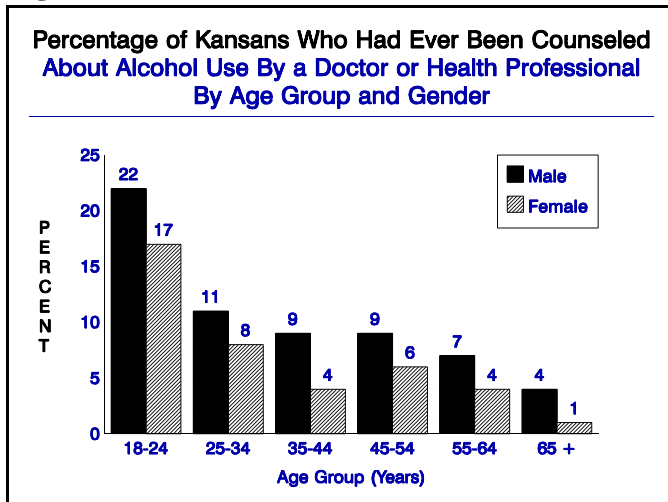
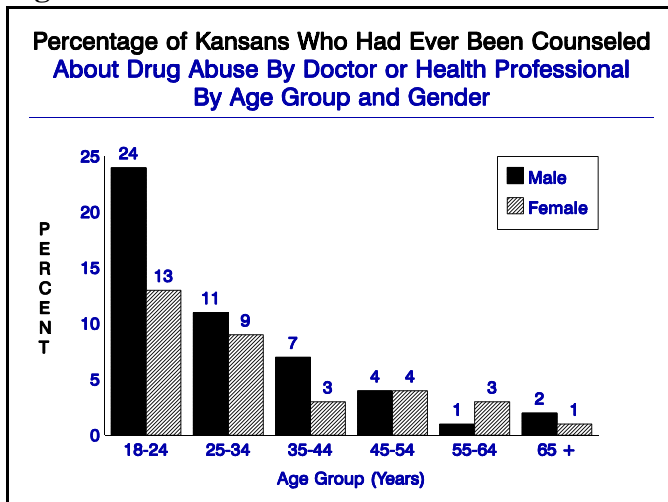
**Figure 150**

**Figure 152**

**Figure 154**


Figure 151

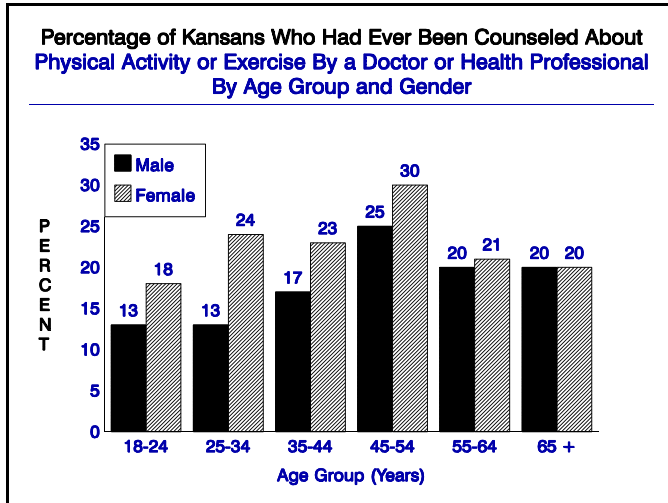


Figure 153

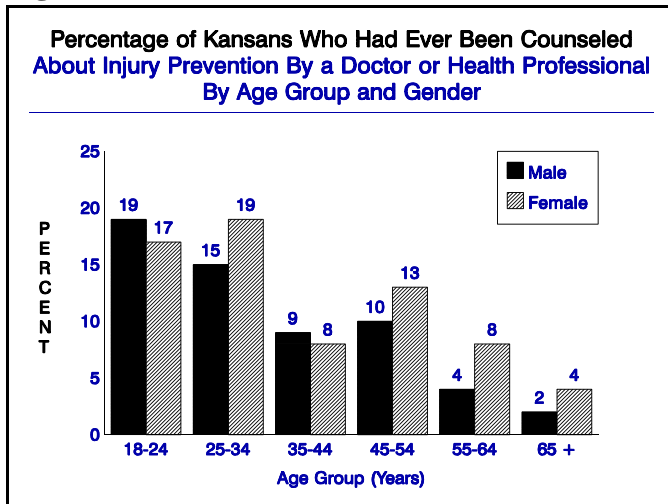
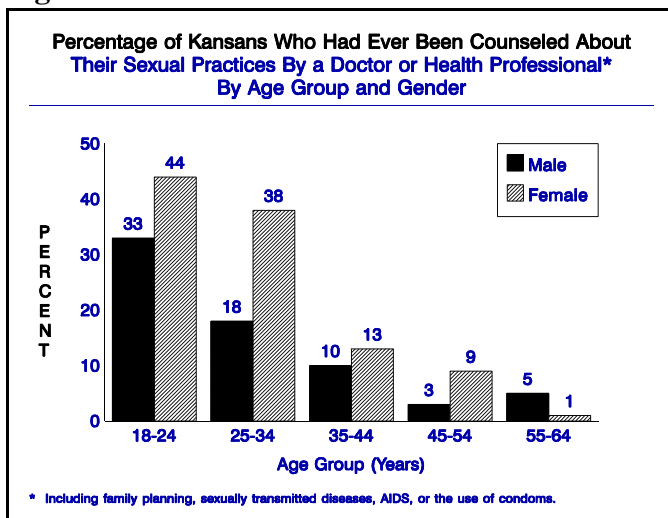


Figure 155





## Healthy Kansans 2000 Objectives Measured by BRFSS Data

Healthy Kansans 2000 Objectives	Healthy Kansans 2000 Target	Kansas 1996	United States 1996
Reduce the prevalence of being overweight among Kansans aged 18 and older.	# 20%	26%	29%
Increase the proportion of Kansans engaging in regular physical activity at least 5 times a week for at least 30 minutes.	\$ 40%	18%	21%
Decrease the proportion of Kansans engaging in no leisure time physical activity.	# 15%	36%	28%
Increase fruit and vegetable consumption to \$ 5 servings a day.	\$ 35%	28%	24%
Reduce the prevalence of current smoking.	# 15%	22%	24%
Reduce smokeless tobacco use by males aged 18 and older.	# 4%	9%	8%
Increase the proportion of women aged 40 and older who have ever received a physical breast exam and a mammogram.	\$ 80%	74%	79%
Increase the proportion of women aged 50 and older who have received a physical breast exam and a mammogram within past 2 yrs.	\$ 60%	61%	64%
Increase the proportion of women aged 18 and older with uterine cervix who have ever received a Pap smear test.	\$ 98%	95%	90%
Increase the proportion of women aged 18 and older with uterine cervix who have received a Pap smear test in the past 2 yrs.	\$ 90%	81%	NA
Increase the proportion of adults with health care coverage.	\$ 92%	90%	87%
Reduce the proportion of adults without health care coverage due to cost.	# 6%	9%	NA
Increase the proportion of Kansans who have a specific source of primary care for their ongoing preventive and episodic health care.	\$ 95%	90%	90%

---

## References

- 1 Kish, L. *Survey Sampling*. New York, NY: John Wiley and Sons, 1965.
- 2 Helyar T, ed. *Kansas Statistical Abstract 1993-94*. Institute for Public Policy and Business Research, University of Kansas.
- 3 American Cancer Society. *Cancer Facts & Figures-1995*. Atlanta, GA: ACS, 1995.
- 4 Schulz JM, Novotny TE, and Rice DP. *Sammec II: computer software and documentation*. Rockville, MD: U.S. Dept. of Health and Human services, Public Health Service, Centers for Disease Control and Prevention, 1990.
- 5 Novotny TE. Tobacco Use. IN: Brownson RC, Remington PL, Davis JR, eds. *Chronic Disease Epidemiology and Control*. APHA, Baltimore, MD: Port City Press, 1993: pp 199-220.
- 6 U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Atlanta, GA. 1994.
- 7 Wilmore JH. Exercise, Obesity, and Weight Control. Corbin C, Pangrazi B, eds. *Physical Activity and Fitness Research Digest*. President's Council on Physical Fitness and Sports, Washington D.C.: Series 1, No. 6. May 1994.
- 8 *Healthy People 2000 National Health Promotion and Disease Prevention Objectives*. US Department of Health and Human Services, Public Health Service, 1990.
- 9 Public Health Service. *The Surgeon General's Report on Nutrition and Health*. DHHS (PHS) Pub. No. 88-50210. Washington, D.C.: U.S. Dept. of Health and Human Services, 1988.
- 10 U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
- 11 *AIDS Quarterly: Kansas and the United States*. Topeka, KS: Kansas Dept. of Health & Environment, Bureau of Disease Control, AIDS section; January 1997.
- 12 Public Health Service. *Diabetes in the United States: A Strategy for Prevention*. Washington, DC: U.S. Department of Health & Human Services; 1994.
- 13 Kansas Department of Health and Environment, Vital Statistics.
- 14 *Perspectives in Health Promotion and Aging*. National Eldercare Institute on Health Promotion, AARP; 1992. Volume 7, Number 2.
- 15 Kansas Cancer Registry, 1992.
- 16 Kansas Bureau of Investigation. *Crime in Kansas 1993-1994*. Topeka, KS: Kansas Bureau of Investigation, Crime Data Information Center, May 1996.
- 17 Baker SP, O'Neill B, Ginsburg MJ, Guohua L. *The Injury Fact Book*. New York, NY: Oxford University Press, 1992: pp 134-148.
- 18 Resnick, NM. Geriatric Medicine. IN: Isselbacher KJ, Braunwald E, Wilson JD, Martin JB, Fauci AS, Kasper DL, eds. *Harrison's Principles of Internal Medicine, thirteenth edition*. New York, NY: McGraw-Hill, Inc., 1994: pp 30-38.
- 19 Stevens JA, Thomas TA. *Major Causes of Unintentional Injuries Among Older Persons: An Annotated Bibliography*. Atlanta, GA: National Center for Injury Prevention and Control, 1996.

- 20 Office of Disease Prevention and Health Promotion, U.S. Public Health Service, U.S. Dept. of Health and Human Services. *Disease Prevention/Health Promotion: The Facts*. Palo Alto, CA: Bull Publishing Company, 1988: pp. 76-85.
- 21 Kansas State Fire Marshal. *Fire in Kansas: 1996*. Topeka, KS: State Fire Marshal's Office, 1997.
- 22 The National Committee for Injury Prevention and Control. *Injury Prevention: Meeting the Challenge*. New York, NY: Oxford University Press; 1989.
- 23 U.S. Preventive Services Task Force. *Guide to Clinical Preventive Services, 2nd ed.* Baltimore: Williams & Wilkens, 1996: pp. 711-721.

# Appendices

## Appendices Definitions:

**Total Sample Size:** The number of respondents who belong to each demographic category.

**Number At Risk (Unweighted):** The raw number of respondents who reported being at risk for the defined health risk behavior.

**Population At Risk (Weighted):** Percentage of Kansans at risk for the defined health risk behavior. The data is weighted to more closely resemble the characteristics of the population of Kansas (See interpretation of results for more information on the weighting procedure).

Table A: Current Cigarette Use

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2002	441	22
<b>Age Group</b>			
18-24	164	36	24
25-34	379	93	25
35-44	503	131	25
45-54	316	90	27
55-64	181	41	22
65+	451	49	10
Unknown/Refused	8	1	--
<b>Gender</b>			
Male	856	222	26
Female	1146	219	18
<b>Race</b>			
White, Non-Hispanic	1779	397	23
Black, Non-Hispanic	94	19	15
Hispanic	100	21	20
Other	26	3	--
Refused	3	1	--
<b>Education</b>			
< H.S. Grad.	203	52	28
High School Grad.	679	197	30
Some College	600	123	19
College Grad.	516	69	13
Unknown/Refused	4	--	--
<b>Household Income</b>			
\$0-\$9,999	80	24	28
\$10,000-\$19,999	273	79	31
\$20,000-\$34,999	627	155	24
\$35,000-\$49,999	444	83	19
\$50,000+	317	55	17
Unknown/Refused	261	45	19
<b>Employment</b>			
Employed for Wages	1205	290	24
Self-Employed	156	45	32
Not Emp. for Wages	184	49	23
Retired	454	57	12
Unknown/Refused	3	--	--
<b>Marital Status</b>			
Married	1131	223	20
Divorced/Separated	280	105	40
Widowed	264	35	14
Never Married/U.C.	314	75	26
Unknown/Refused	13	3	--
<b>Pop. Density</b>			
Urban	859	189	22
Mixed Urban & Rural	746	167	22
Rural	384	83	22
Unknown/Refused	13	2	--

Table B: Smokeless Tobacco Use

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1934	75	4
<b>Age Group</b>			
18-24	161	12	8
25-34	368	23	6
35-44	492	23	5
45-54	301	6	2
55-64	172	5	3
65+	435	6	1
Unknown/Refused	5	--	--
<b>Gender</b>			
Male	832	74	9
Female	1102	1	.1
<b>Race</b>			
White, Non-Hispanic	1722	69	4
Black, Non-Hispanic	90	1	1
Hispanic	96	3	3
Other	24	2	--
Refused	2	--	--
<b>Education</b>			
< H.S. Grad.	192	5	2
High School Grad.	659	29	5
Some College	578	27	5
College Grad.	501	14	3
Unknown/Refused	4	--	--
<b>Household Income</b>			
\$0-\$9,999	76	1	1
\$10,000-\$19,999	268	8	4
\$20,000-\$34,999	605	40	8
\$35,000-\$49,999	438	13	3
\$50,000+	309	9	3
Unknown/Refused	238	4	1
<b>Employment</b>			
Employed for Wages	1171	50	5
Self-Employed	151	14	11
Not Emp. for Wages	174	5	2
Retired	435	6	1
Unknown/Refused	3	--	--
<b>Marital Status</b>			
Married	1096	45	4
Divorced/Separated	269	8	4
Widowed	251	4	2
Never Married/U.C.	305	18	6
Unknown/Refused	13	--	--
<b>Pop. Density</b>			
Urban	830	13	2
Mixed Urban & Rural	725	40	6
Rural	370	22	6
Unknown/Refused	9	--	--

Table C: Overweight\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1883	495	26
<b>Age Group</b>			
18-24	160	24	17
25-34	362	77	21
35-44	482	134	27
45-54	289	101	34
55-64	178	56	33
65+	408	102	25
Unknown/Refused	4	1	--
<b>Gender</b>			
Male	836	219	26
Female	1047	276	26
<b>Race</b>			
White, Non-Hispanic	1679	435	26
Black, Non-Hispanic	86	34	36
Hispanic	93	22	21
Other	22	4	--
Refused	3	--	--
<b>Education</b>			
< H.S. Grad.	182	62	35
High School Grad.	637	177	28
Some College	565	138	24
College Grad.	496	118	23
Unknown/Refused	3	--	--
<b>Household Income</b>			
\$0-\$9,999	78	30	39
\$10,000-\$19,999	263	83	31
\$20,000-\$34,999	595	148	24
\$35,000-\$49,999	430	106	24
\$50,000+	303	73	24
Unknown/Refused	214	55	28
<b>Employment</b>			
Employed for Wages	1150	301	26
Self-Employed	151	37	26
Not Emp. for Wages	168	48	24
Retired	411	107	26
Unknown/Refused	3	2	--
<b>Marital Status</b>			
Married	1069	306	29
Divorced/Separated	263	67	24
Widowed	238	57	23
Never Married/U.C.	303	61	19
Unknown/Refused	10	4	--
<b>Pop. Density</b>			
Urban	800	201	25
Mixed Urban & Rural	708	185	26
Rural	367	107	28
Unknown/Refused	8	2	--

\* Based on Body Mass Index.

Table D: Fruit and Vegetable Intake\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2008	1438	72
<b>Age Group</b>			
18-24	164	130	79
25-34	379	292	78
35-44	505	371	74
45-54	316	228	71
55-64	182	125	69
65+	454	287	63
Unknown/Refused	8	5	--
<b>Gender</b>			
Male	859	621	73
Female	1149	817	70
<b>Race</b>			
White, Non-Hispanic	1785	1272	71
Black, Non-Hispanic	94	74	80
Hispanic	100	72	70
Other	26	17	--
Refused	3	3	--
<b>Education</b>			
< H.S. Grad.	204	155	77
High School Grad.	681	515	76
Some College	601	412	68
College Grad.	518	353	69
Unknown/Refused	4	3	--
<b>Household Income</b>			
\$0-\$9,999	81	62	76
\$10,000-\$19,999	275	213	80
\$20,000-\$34,999	627	465	75
\$35,000-\$49,999	444	301	68
\$50,000+	319	303	65
Unknown/Refused	262	194	73
<b>Employment</b>			
Employed for Wages	1208	910	75
Self-Employed	157	107	70
Not Emp. for Wages	184	127	69
Retired	456	291	62
Unknown/Refused	3	3	--
<b>Marital Status</b>			
Married	1135	804	71
Divorced/Separated	281	216	77
Widowed	265	181	68
Never Married/U.C.	314	229	75
Unknown/Refused	13	8	--
<b>Pop. Density</b>			
Urban	862	620	73
Mixed Urban & Rural	747	742	72
Rural	386	265	69
Unknown/Refused	13	11	--

Consumed less than 5 servings of fruits and vegetables a day.

Table E: Sedentary Lifestyle\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2007	1176	58
<b>Age Group</b>			
18-24	164	86	53
25-34	379	210	56
35-44	505	260	52
45-54	316	191	60
55-64	182	111	63
65+	453	313	68
Unknown/Refused	8	5	--
<b>Gender</b>			
Male	858	519	60
Female	1149	657	57
<b>Race</b>			
White, Non-Hispanic	1784	1041	58
Black, Non-Hispanic	94	61	70
Hispanic	100	60	60
Other	26	13	--
Refused	3	1	--
<b>Education</b>			
< H.S. Grad.	204	163	76
High School Grad.	680	452	66
Some College	601	327	54
College Grad.	518	231	46
Unknown/Refused	4	3	--
<b>Household Income</b>			
\$0-\$9,999	81	57	67
\$10,000-\$19,999	275	198	72
\$20,000-\$34,999	627	381	61
\$35,000-\$49,999	444	218	50
\$50,000+	319	147	48
Unknown/Refused	261	175	66
<b>Employment</b>			
Employed for Wages	1208	658	56
Self-Employed	157	105	68
Not Emp. for Wages	184	112	56
Retired	455	299	63
Unknown/Refused	3	2	--
<b>Marital Status</b>			
Married	1135	636	57
Divorced/Separated	281	179	64
Widowed	264	192	74
Never Married/U.C.	314	159	54
Unknown/Refused	13	10	--
<b>Pop. Density</b>			
Urban	862	499	59
Mixed Urban & Rural	746	420	55
Rural	386	245	64
Unknown/Refused	13	12	--

\* Does not engage in physical activity at least 3 times a week for at least 20 minutes each time. \*

Table F: Regular Physical Activity\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2007	1647	82
<b>Age Group</b>			
18-24	164	129	80
25-34	379	307	81
35-44	505	405	81
45-54	316	256	81
55-64	182	149	83
65+	453	393	86
Unknown/Refused	8	7	--
<b>Gender</b>			
Male	858	700	81
Female	1149	947	83
<b>Race</b>			
White, Non-Hispanic	1784	1456	82
Black, Non-Hispanic	94	77	84
Hispanic	100	88	87
Other	26	24	--
Refused	3	2	--
<b>Education</b>			
< H.S. Grad.	204	184	88
High School Grad.	680	592	87
Some College	601	478	79
College Grad.	518	390	76
Unknown/Refused	4	3	--
<b>Household Income</b>			
\$0-\$9,999	81	71	88
\$10,000-\$19,999	275	237	86
\$20,000-\$34,999	627	519	82
\$35,000-\$49,999	444	355	80
\$50,000+	319	244	78
Unknown/Refused	261	220	84
<b>Employment</b>			
Employed for Wages	1208	976	81
Self-Employed	157	133	86
Not Emp. for Wages	184	151	80
Retired	455	383	83
Unknown/Refused	3	3	--
<b>Marital Status</b>			
Married	1135	936	83
Divorced/Separated	281	236	83
Widowed	264	229	87
Never Married/U.C.	314	235	77
Unknown/Refused	13	11	--
<b>Pop. Density</b>			
Urban	862	717	84
Mixed Urban & Rural	746	592	78
Rural	386	324	85
Unknown/Refused	13	13	--

Does not engage in physical activity at least 5 times a week for at least 30 minutes each time.

Table G: HIV/AIDS\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1474	107	8
<b>Age Group</b>			
18-24	159	22	16
25-34	368	26	7
35-44	490	33	6
45-54	292	18	6
55-64	162	8	4
Unknown/Refused	3	--	--
<b>Gender</b>			
Male	676	54	9
Female	798	53	6
<b>Race</b>			
White, Non-Hispanic	1298	90	7
Black, Non-Hispanic	75	9	19
Hispanic	80	7	10
Other	19	1	--
Refused	2	--	--
<b>Education</b>			
< H.S. Grad.	86	3	5
High School Grad.	470	28	6
Some College	486	48	10
College Grad.	432	28	7
<b>Household Income</b>			
\$0-\$9,999	43	3	4
\$10,000-\$19,999	159	19	11
\$20,000-\$34,999	476	32	7
\$35,000-\$49,999	385	26	7
\$50,000+	289	19	8
Unknown/Refused	122	8	8
<b>Employment</b>			
Employed for Wages	1138	85	7
Self-Employed	128	4	3
Not Emp. for Wages	164	16	13
Retired	41	2	6
Unknown/Refused	3	--	--
<b>Marital Status</b>			
Married	900	51	6
Divorced/Separated	234	23	8
Widowed	37	1	2
Never Married/U.C.	294	32	14
Unknown/Refused	9	--	--
<b>Pop. Density</b>			
Urban	675	52	9
Mixed Urban & Rural	545	38	7
Rural	249	17	7
Unknown/Refused	5	--	--

\* Self-reported risk for contracting HIV was medium or high.

Table H: Diabetes Mellitus

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2000	71	4
<b>Age Group</b>			
18-24	163	1	1
25-34	379	1	1
35-44	501	8	1
45-54	315	9	3
55-64	182	11	7
65+	452	40	10
Unknown/Refused	8	1	--
<b>Gender</b>			
Male	854	30	3
Female	1146	41	4
<b>Race</b>			
White, Non-Hispanic	1779	58	3
Black, Non-Hispanic	92	6	7
Hispanic	100	3	3
Other	26	4	--
Refused	3	--	--
<b>Education</b>			
< H.S. Grad.	202	16	9
High School Grad.	679	24	4
Some College	599	21	3
College Grad.	516	9	2
Unknown/Refused	4	1	--
<b>Household Income</b>			
\$0-\$9,999	81	9	12
\$10,000-\$19,999	274	19	7
\$20,000-\$34,999	624	16	3
\$35,000-\$49,999	442	6	1
\$50,000+	318	6	2
Unknown/Refused	261	15	6
<b>Employment</b>			
Employed for Wages	1203	18	1
Self-Employed	155	2	2
Not Emp. for Wages	184	11	5
Retired	455	39	9
Unknown/Refused	3	1	--
<b>Marital Status</b>			
Married	1132	34	3
Divorced/Separated	279	15	6
Widowed	264	17	7
Never Married/U.C.	312	5	1
Unknown/Refused	13	--	--
<b>Pop. Density</b>			
Urban	859	28	3
Mixed Urban & Rural	744	29	4
Rural	384	14	3
Unknown/Refused	13	--	--



**Table I: Breast Cancer Screening  
Have Not Had A Recent Clinical  
Breast Exam\*, Women Aged 20 And  
Older**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1073	181	16
<b>Age Group</b>			
20-39	409	42	10
40-49	218	25	13
50-59	120	20	15
60-69	118	30	26
70+	208	64	29
<b>Race</b>			
White, Non-Hispanic	955	161	16
Black, Non-Hispanic	55	8	12
Hispanic	50	9	19
Other	13	3	--
<b>Education</b>			
< H.S. Grad.	118	29	26
High School Grad.	360	65	17
Some College	333	55	16
College Grad.	259	32	12
Unknown/Refused	3	--	--
<b>Household Income</b>			
\$0-\$9,999	54	18	29
\$10,000-\$19,999	179	38	24
\$20,000-\$34,999	307	58	20
\$35,000-\$49,999	233	18	7
\$50,000+	157	16	10
Unknown/Refused	143	33	21
<b>Employment</b>			
Employed for Wages	618	67	11
Self-Employed	48	12	22
Not Emp. for Wages	130	22	15
Retired	275	79	28
Unknown/Refused	2	1	--
<b>Marital Status</b>			
Married	562	72	14
Divorced/Separated	178	34	20
Widowed	193	54	27
Never Married/U.C.	132	18	14
Unknown/Refused	8	3	--
<b>Pop. Density</b>			
Urban	482	68	14
Mixed Urban & Rural	384	72	18
Rural	202	41	18
Unknown/Refused	5	--	--

**Table J: Breast Cancer Screening  
Have Not Had A Mammogram Within  
The Past Two Years, Women Aged  
40 And Older**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	667	215	30
<b>Age Group</b>			
40-49	220	75	34
50-59	120	26	21
60-69	127	26	21
70+	210	88	39
<b>Race</b>			
White, Non-Hispanic	611	195	30
Black, Non-Hispanic	31	12	--
Hispanic	20	8	--
Other	5	--	--
<b>Education</b>			
< H.S. Grad.	99	48	46
High School Grad.	250	81	30
Some College	181	57	31
College Grad.	134	28	19
Unknown/Refused	3	1	--
<b>Household Income</b>			
\$0-\$19,999	160	66	41
\$20,000-\$34,999	164	58	36
\$35,000-\$49,999	141	36	24
\$50,000+	92	13	12
Unknown/Refused	110	42	35
<b>Employment</b>			
Employed for Wages	297	75	24
Self-Employed	30	12	--
Not Emp. for Wages	61	24	38
Retired	278	104	35
Unknown/Refused	1	--	--
<b>Marital Status</b>			
Married	332	84	25
Divorced/Separated	110	38	33
Widowed	192	78	40
Never Married/U.C.	32	14	--
Unknown/Refused	1	1	--
<b>Pop. Density</b>			
Urban	281	77	27
Mixed Urban & Rural	239	84	32
Rural	145	54	35
Unknown/Refused	2	--	--

\* Women aged 20-39 a CBE within the past 3 years.  
Women aged 40+ a CBE within the past 2 years.

**Table K: Breast Cancer Screening  
Have Not Had Both A Clinical  
Breast Exam And A Mammogram  
Within the Past Two Years,  
Women Aged 40 And Older**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	665	253	36
<b>Age Group</b>			
40-49	219	81	38
50-59	119	31	25
60-69	117	36	30
70+	210	105	46
<b>Race</b>			
White, Non-Hispanic	609	233	37
Black, Non-Hispanic	31	12	--
Hispanic	20	8	--
Other	5	--	--
<b>Education</b>			
< H.S. Grad.	98	55	56
High School Grad.	249	94	35
Some College	182	66	35
College Grad.	133	37	28
Unknown/Refused	3	1	--
<b>Household Income</b>			
\$0-\$19,999	159	79	49
\$20,000-\$34,999	164	63	41
\$35,000-\$49,999	140	39	26
\$50,000+	92	20	22
Unknown/Refused	110	52	42
<b>Employment</b>			
Employed for Wages	295	86	29
Self-Employed	30	13	39
Not Emp. for Wages	61	27	43
Retired	278	126	42
Unknown/Refused	1	1	--
<b>Marital Status</b>			
Married	330	97	29
Divorced/Separated	110	45	42
Widowed	192	94	49
Never Married/U.C.	32	16	--
Unknown/Refused	1	1	--
<b>Pop. Density</b>			
Urban	280	91	32
Mixed Urban & Rural	238	100	40
Rural	145	62	40
Unknown/Refused	3	--	--

**Table L: Cervical Cancer Screening  
Have Not Had A Pap Smear Test  
Within The Past Two Years, Women  
Aged 18 And Older With a Uterine  
Cervix**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	875	164	19
<b>Age Group</b>			
18-24	100	15	19
25-34	185	21	11
35-44	226	29	12
45-54	120	18	15
55-64	56	15	28
65+	184	65	35
Unknown/Refused	4	1	--
<b>Race</b>			
White, Non-Hispanic	777	145	18
Black, Non-Hispanic	44	7	16
Hispanic	42	9	24
Other	12	3	--
<b>Education</b>			
< H.S. Grad.	85	31	39
High School Grad.	289	65	22
Some College	275	41	16
College Grad.	224	27	11
Unknown/Refused	2	--	--
<b>Household Income</b>			
\$0-\$19,999	176	40	26
\$20,000-\$34,999	260	53	21
\$35,000-\$49,999	207	21	9
\$50,000+	124	12	10
Unknown/Refused	113	38	33
<b>Employment</b>			
Employed for Wages	537	69	13
Self-Employed	36	10	--
Not Emp. for Wages	119	21	19
Retired	180	63	35
Unknown/Refused	3	1	--
<b>Marital Status</b>			
Married	452	67	16
Divorced/Separated	145	27	18
Widowed	127	43	35
Never Married/U.C.	143	24	19
Unknown/Refused	8	3	--
<b>Pop. Density</b>			
Urban	409	68	17
Mixed Urban & Rural	316	63	20
Rural	145	31	20
Unknown/Refused	5	2	--

Table M: Lack Health Care Coverage

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	2004	190	10
<b>Age Group</b>			
18-24	161	36	25
25-34	378	54	14
35-44	505	54	9
45-54	316	23	7
55-64	182	18	9
65+	454	4	1
Unknown/Refused	8	1	--
<b>Gender</b>			
Male	858	83	10
Female	1146	107	10
<b>Race</b>			
White, Non-Hispanic	1781	156	10
Black, Non-Hispanic	94	17	15
Hispanic	100	13	13
Other	26	4	--
Refused	3	--	--
<b>Education</b>			
< H.S. Grad.	202	30	19
High School Grad.	680	81	13
Some College	601	51	8
College Grad.	517	28	6
Unknown/Refused	4	--	--
<b>Household Income</b>			
\$0-\$9,999	80	15	24
\$10,000-\$19,999	274	44	17
\$20,000-\$34,999	627	85	15
\$35,000-\$49,999	444	15	3
\$50,000+	318	7	1
Unknown/Refused	261	24	11
<b>Employment</b>			
Employed for Wages	1206	109	10
Self-Employed	157	34	22
Not Emp. for Wages	183	38	19
Retired	456	8	2
Unknown/Refused	2	1	--
<b>Marital Status</b>			
Married	1135	78	7
Divorced/Separated	281	47	18
Widowed	265	7	3
Never Married/U.C.	310	57	21
Unknown/Refused	13	1	--
<b>Pop. Density</b>			
Urban	861	68	8
Mixed Urban & Rural	744	86	12
Rural	386	35	10
Unknown/Refused	13	1	--

Table N: Afraid to Leave Home At Night\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1870	605	31
<b>Age Group</b>			
18-24	157	57	33
25-34	363	107	29
35-44	483	174	35
45-54	293	89	29
55-64	164	40	25
65+	405	136	32
Unknown/Refused	5	2	--
<b>Gender</b>			
Male	816	166	21
Female	1054	439	40
<b>Race</b>			
White, Non-Hispanic	1664	520	30
Black, Non-Hispanic	88	40	41
Hispanic	93	36	37
Other	24	9	--
Refused	1	--	--
<b>Education</b>			
< H.S. Grad.	179	72	34
High School Grad.	634	221	34
Some College	569	203	36
College Grad.	485	109	21
Unknown/Refused	3	--	--
<b>Household Income</b>			
\$0-\$9,999	73	26	33
\$10,000-\$19,999	259	78	27
\$20,000-\$34,999	593	188	30
\$35,000-\$49,999	434	162	37
\$50,000+	297	69	23
Unknown/Refused	214	82	39
<b>Employment</b>			
Employed for Wages	1148	365	31
Self-Employed	147	19	13
Not Emp. for Wages	166	78	42
Retired	407	143	33
Unknown/Refused	2	--	--
<b>Marital Status</b>			
Married	1069	314	28
Divorced/Separated	260	93	36
Widowed	232	97	42
Never Married/U.C.	296	97	33
Unknown/Refused	13	4	--
<b>Pop. Density</b>			
Urban	812	329	40
Mixed Urban & Rural	696	193	26
Rural	356	79	21
Unknown/Refused	6	4	--

\* Very afraid, somewhat afraid, or a little afraid to leave home at night.

Table O: Violent Neighborhood\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1872	151	8
<b>Age Group</b>			
18-24	156	18	12
25-34	362	41	11
35-44	482	47	9
45-54	292	19	6
55-64	165	10	6
65+	411	16	4
Unknown/Refused	4	--	--
<b>Gender</b>			
Male	812	63	8
Female	1060	88	8
<b>Race</b>			
White, Non-Hispanic	1666	112	7
Black, Non-Hispanic	87	16	18
Hispanic	94	19	20
Other	23	4	--
Refused	2	--	--
<b>Education</b>			
< H.S. Grad.	178	21	13
High School Grad.	633	69	10
Some College	569	41	8
College Grad.	489	20	4
Unknown/Refused	3	--	--
<b>Household Income</b>			
\$0-\$9,999	74	8	9
\$10,000-\$19,999	258	24	8
\$20,000-\$34,999	592	63	11
\$35,000-\$49,999	433	24	6
\$50,000+	298	17	7
Unknown/Refused	217	15	8
<b>Employment</b>			
Employed for Wages	1145	100	9
Self-Employed	148	8	6
Not Emp. for Wages	166	24	14
Retired	411	19	4
Unknown/Refused	2	--	--
<b>Marital Status</b>			
Married	1068	73	7
Divorced/Separated	260	28	12
Widowed	235	12	5
Never Married/U.C.	296	37	13
Unknown/Refused	13	1	--
<b>Pop. Density</b>			
Urban	815	77	9
Mixed Urban & Rural	693	61	9
Rural	358	12	3
Unknown/Refused	6	1	--

Table P: Knew Abused Partner\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1886	559	30
<b>Age Group</b>			
18-24	156	64	38
25-34	363	130	37
35-44	485	186	38
45-54	296	89	28
55-64	167	43	25
65+	414	47	10
Unknown/Refused	5	5	--
<b>Gender</b>			
Male	821	220	27
Female	1065	339	32
<b>Race</b>			
White, Non-Hispanic	1678	489	29
Black, Non-Hispanic	88	28	32
Hispanic	94	37	38
Other	24	5	16
Refused	3	--	--
<b>Education</b>			
< H.S. Grad.	183	42	22
High School Grad.	641	182	28
Some College	571	186	34
College Grad.	488	148	30
Unknown/Refused	4	1	--
<b>Household Income</b>			
\$0-\$9,999	74	14	19
\$10,000-\$19,999	260	66	24
\$20,000-\$34,999	596	181	30
\$35,000-\$49,999	436	155	34
\$50,000+	299	92	32
Unknown/Refused	221	51	24
<b>Employment</b>			
Employed for Wages	1155	417	35
Self-Employed	148	35	23
Not Emp. for Wages	167	56	36
Retired	414	50	11
Unknown/Refused	3	1	--
<b>Marital Status</b>			
Married	1072	302	28
Divorced/Separated	265	94	34
Widowed	238	45	21
Never Married/U.C.	298	117	39
Unknown/Refused	13	1	--
<b>Pop. Density</b>			
Urban	818	253	31
Mixed Urban & Rural	700	214	30
Rural	362	89	26
Unknown/Refused	6	3	--

\* Witnessed a violent crime in their neighborhood during the last year. \* Knew or saw someone who had been beaten or otherwise hurt by a spouse or partner.

Table Q: Joint Symptoms

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1928	690	34
<b>Age Group</b>			
18-24	161	26	16
25-34	368	84	23
35-44	491	136	26
45-54	300	124	41
55-64	172	71	42
65+	431	246	57
Unknown/Refused	5	3	--
<b>Gender</b>			
Male	830	264	31
Female	1098	426	37
<b>Race</b>			
White, Non-Hispanic	1716	621	35
Black, Non-Hispanic	90	32	34
Hispanic	96	31	29
Other	24	5	--
Refused	2	1	--
<b>Education</b>			
< H.S. Grad.	191	96	48
High School Grad.	656	224	33
Some College	577	208	34
College Grad.	500	161	33
Unknown/Refused	4	1	--
<b>Household Income</b>			
\$0-\$9,999	77	43	48
\$10,000-\$19,999	268	118	42
\$20,000-\$34,999	601	185	30
\$35,000-\$49,999	438	144	32
\$50,000+	308	103	33
Unknown/Refused	236	97	38
<b>Employment</b>			
Employed for Wages	1168	329	28
Self-Employed	150	46	30
Not Emp. for Wages	175	68	35
Retired	432	245	56
Unknown/Refused	3	2	--
<b>Marital Status</b>			
Married	1091	381	35
Divorced/Separated	270	90	33
Widowed	249	142	57
Never Married/U.C.	305	76	21
Unknown/Refused	13	1	--
<b>Pop. Density</b>			
Urban	830	298	34
Mixed Urban & Rural	720	236	33
Rural	369	154	40
Unknown/Refused	9	2	--

\* Had pain, aching, stiffness, or swelling in or around a joint during the past 12 months.

Table R: Arthritis

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1724	377	21
<b>Age Group</b>			
18-24	139	8	7
25-34	324	23	7
35-44	429	46	11
45-54	271	63	23
55-64	151	48	32
65+	405	187	46
Unknown/Refused	5	2	--
<b>Gender</b>			
Male	740	129	17
Female	984	248	25
<b>Race</b>			
White, Non-Hispanic	1535	344	22
Black, Non-Hispanic	79	22	24
Hispanic	87	9	12
Other	22	2	--
Refused	1	--	--
<b>Education</b>			
< H.S. Grad.	168	65	40
High School Grad.	589	130	21
Some College	523	100	17
College Grad.	440	81	19
Unknown/Refused	4	1	--
<b>Household Income</b>			
\$0-\$9,999	68	28	40
\$10,000-\$19,999	239	76	30
\$20,000-\$34,999	532	97	19
\$35,000-\$49,999	400	60	15
\$50,000+	274	51	18
Unknown/Refused	211	65	28
<b>Employment</b>			
Employed for Wages	1031	137	14
Self-Employed	131	17	12
Not Emp. for Wages	159	36	21
Retired	400	186	46
Unknown/Refused	3	1	--
<b>Marital Status</b>			
Married	977	193	21
Divorced/Separated	235	49	24
Widowed	227	107	47
Never Married/U.C.	276	27	8
Unknown/Refused	13	1	--
<b>Pop. Density</b>			
Urban	738	152	19
Mixed Urban & Rural	643	142	21
Rural	338	81	23
Unknown/Refused	5	2	--

**Table S: Falls  
Kansans Aged 65 and Older**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	412	70	16
<b>Age Group</b>			
65-74	219	8	10
75-84	149	23	24
85+	44	2	25
<b>Gender</b>			
Male	141	24	17
Female	271	46	15
<b>Education</b>			
< H.S. Grad.	93	17	19
High School Grad.	172	23	12
Some College or College Grad.	145	29	19
Unknown/Refused	2	1	--
<b>Household Income</b>			
\$0-\$14,999	87	16	15
\$15,000-\$24,999	99	15	16
\$25,000-\$34,999	66	12	17
\$35,000+	67	5	8
Unknown/Refused	93	22	23
<b>Employment</b>			
Retired	368	64	16
Other	44	6	14
<b>Marital Status</b>			
Married	171	23	13
Widowed	201	40	21
Other	37	7	--
Unknown/Refused	3	--	--
<b>Pop. Density</b>			
Urban	142	25	18
Mixed Urban & Rural	162	23	13
Rural	106	22	18
Unknown/Refused	3	--	--

**Table T: Any Activity Limitation**

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1896	298	15
<b>Age Group</b>			
18-24	157	12	7
25-34	364	29	8
35-44	485	55	10
45-54	297	33	10
55-64	168	36	22
65+	420	133	32
Unknown/Refused	5	--	--
<b>Gender</b>			
Male	826	114	13
Female	1070	184	16
<b>Race</b>			
White, Non-Hispanic	1687	269	15
Black, Non-Hispanic	89	13	12
Hispanic	94	12	12
Other	24	3	14
Refused	3	1	--
<b>Education</b>			
< H.S. Grad.	184	47	28
High School Grad.	644	105	14
Some College	574	81	13
College Grad.	491	64	12
Unknown/Refused	3	1	--
<b>Household Income</b>			
\$0-\$9,999	74	31	42
\$10,000-\$19,999	260	61	22
\$20,000-\$34,999	599	79	13
\$35,000-\$49,999	434	35	8
\$50,000+	303	39	11
Unknown/Refused	226	53	21
<b>Employment</b>			
Employed for Wages	1157	97	8
Self-Employed	148	20	15
Not Emp. for Wages	168	44	21
Retired	421	136	32
Unknown/Refused	2	1	--
<b>Marital Status</b>			
Married	1078	139	13
Divorced/Separated	265	44	16
Widowed	242	75	32
Never Married/U.C.	298	38	10
Unknown/Refused	13	2	--
<b>Pop. Density</b>			
Urban	822	123	14
Mixed Urban & Rural	705	96	13
Rural	361	79	20
Unknown/Refused	8	--	--

Table U: Personal Care Limitation  
Kansans Aged 65 and Older

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	413	28	6
<b>Age Group</b>			
65-74	220	9	4
75-84	149	13	7
85+	44	6	15
<b>Gender</b>			
Male	141	5	3
Female	272	23	8
<b>Education</b>			
< H.S. Grad.	92	10	13
High School Grad.	175	14	6
Some College or College Grad.	144	3	1
Unknown/Refused	2	1	--
<b>Household Income</b>			
\$0-\$14,999	87	8	8
\$15,000-\$24,999	99	6	5
\$25,000-\$34,999	65	1	2
\$35,000+	67	3	3
Unknown/Refused	95	10	10
<b>Employment</b>			
Retired	369	27	6
Other	44	1	3
<b>Marital Status</b>			
Married	172	5	3
Widowed	201	19	10
Other	37	4	--
Unknown/Refused	3	--	--
<b>Pop. Density</b>			
Urban	142	12	8
Mixed Urban & Rural	163	9	5
Rural	106	7	5
Unknown/Refused	2	--	--

Table V: Routine Care Limitation  
Kansans Aged 65 and Older\*

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	415	73	16
<b>Age Group</b>			
65-74	220	22	9
75-84	151	32	20
85+	44	19	45
<b>Gender</b>			
Male	143	14	9
Female	272	59	20
<b>Education</b>			
< H.S. Grad.	93	24	27
High School Grad.	175	28	15
Some college or College Grad.	145	19	10
Unknown/Refused	2	2	--
<b>Household Income</b>			
\$0-\$14,999	87	22	24
\$15,000-\$24,999	99	14	13
\$20,000-\$34,999	66	4	7
\$35,000+	67	8	9
Unknown/Refused	96	25	25
<b>Employment</b>			
Retired	371	69	17
Other	44	4	8
<b>Marital Status</b>			
Married	172	16	9
Widowed	203	49	26
Other	37	8	--
Unknown/Refused	3	--	--
<b>Pop. Density</b>			
Urban	143	29	20
Mixed Urban & Rural	163	24	12
Rural	107	20	17
Unknown/Refused	3	--	--

Table W: Fire Safety: Lack Working Smoke Detector

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1884	216	11
<b>Age Group</b>			
18-24	157	18	10
25-34	365	40	11
35-44	481	53	10
45-54	296	22	7
55-64	165	22	12
65+	416	60	14
Unknown/Refused	4	1	--
<b>Gender</b>			
Male	818	92	10
Female	1066	124	11
<b>Race</b>			
White, Non-Hispanic	1676	193	11
Black, Non-Hispanic	88	10	10
Hispanic	95	11	11
Other	23	1	--
Refused	2	1	--
<b>Education</b>			
< H.S. Grad.	181	34	19
High School Grad.	638	83	12
Some College	570	59	10
College Grad.	491	39	7
Unknown/Refused	4	1	--
<b>Household Income</b>			
\$0-\$9,999	73	17	25
\$10,000-\$19,999	256	44	15
\$20,000-\$34,999	593	85	14
\$35,000-\$49,999	432	30	7
\$50,000+	303	11	3
Unknown/Refused	227	29	13
<b>Employment</b>			
Employed for Wages	1153	117	9
Self-Employed	146	24	15
Not Emp. for Wages	170	21	11
Retired	413	53	12
Unknown/Refused	2	1	--
<b>Marital Status</b>			
Married	1074	108	10
Divorced/Separated	263	43	15
Widowed	237	27	10
Never Married/U.C.	297	36	11
Unknown/Refused	13	2	--
<b>Pop. Density</b>			
Urban	821	52	6
Mixed Urban & Rural	701	91	12
Rural	355	72	18
Unknown/Refused	7	1	--

Table X: Dental Health: Lack a Recent Dental Visit

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1884	606	32
<b>Age Group</b>			
18-24	159	58	36
25-34	364	119	34
35-44	487	115	23
45-54	299	77	25
55-64	162	54	31
65+	408	182	43
Unknown/Refused	5	1	--
<b>Gender</b>			
Male	812	254	31
Female	1072	352	33
<b>Race</b>			
White, Non-Hispanic	1679	534	31
Black, Non-Hispanic	87	30	40
Hispanic	94	33	35
Other	23	8	--
Refused	1	1	--
<b>Education</b>			
< H.S. Grad.	172	99	54
High School Grad.	640	258	40
Some College	575	147	25
College Grad.	494	100	22
Unknown/Refused	3	2	--
<b>Household Income</b>			
\$0-\$9,999	75	40	51
\$10,000-\$19,999	256	127	49
\$20,000-\$34,999	594	227	40
\$35,000-\$49,999	435	92	22
\$50,000+	305	46	16
Unknown/Refused	219	74	33
<b>Employment</b>			
Employed for Wages	1159	328	29
Self-Employed	149	42	30
Not Emp. for Wages	170	52	27
Retired	404	182	44
Unknown/Refused	2	2	--
<b>Marital Status</b>			
Married	1073	303	29
Divorced/Separated	265	98	38
Widowed	232	114	50
Never Married/U.C.	303	85	30
Unknown/Refused	11	6	--
<b>Pop. Density</b>			
Urban	819	227	29
Mixed Urban & Rural	699	239	33
Rural	358	135	38
Unknown/Refused	8	5	--

\* Had not visited a dentist or dental clinic within the past year.



Table Y: Dental Health:  
Lack Dental Coverage

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1898	803	42
<b>Age Group</b>			
18-24	157	64	41
25-34	363	125	34
35-44	484	150	30
45-54	299	104	33
55-64	169	72	43
65+	421	286	69
Unknown/Refused	5	2	--
<b>Gender</b>			
Male	817	318	38
Female	1081	485	45
<b>Race</b>			
White, Non-Hispanic	1689	719	42
Black, Non-Hispanic	89	36	36
Hispanic	95	38	40
Other	24	9	--
Refused	1	1	--
<b>Education</b>			
< H.S. Grad.	186	125	65
High School Grad.	640	300	47
Some College	571	220	38
College Grad.	497	155	30
Unknown/Refused	4	3	--
<b>Household Income</b>			
\$0-\$9,999	75	56	76
\$10,000-\$19,999	259	155	59
\$20,000-\$34,999	593	276	48
\$35,000-\$49,999	434	123	27
\$50,000+	305	70	21
Unknown/Refused	232	123	54
<b>Employment</b>			
Employed for Wages	1154	330	29
Self-Employed	150	95	60
Not Emp. for Wages	170	90	48
Retired	421	285	68
Unknown/Refused	3	3	--
<b>Marital Status</b>			
Married	1078	405	39
Divorced/Separated	266	116	46
Widowed	244	159	66
Never Married/U.C.	297	119	38
Unknown/Refused	13	4	--
<b>Pop. Density</b>			
Urban	820	270	32
Mixed Urban & Rural	706	324	45
Rural	365	205	55
Unknown/Refused	7	4	--

Table Z: Dental Health:  
Need Dental Work

Demographic Characteristics	Total Sample Size	Number At Risk	Population At Risk
	N	n	%
<b>Total</b>	1900	281	15
<b>Age Group</b>			
18-24	159	23	14
25-34	362	76	22
35-44	486	80	15
45-54	296	44	14
55-64	169	22	14
65+	424	36	8
Unknown/Refused	4	--	--
<b>Gender</b>			
Male	818	112	14
Female	1082	169	15
<b>Race</b>			
White, Non-Hispanic	1695	243	14
Black, Non-Hispanic	88	19	17
Hispanic	92	12	14
Other	23	6	27
Refused	2	1	--
<b>Education</b>			
< H.S. Grad.	186	41	26
High School Grad.	643	90	14
Some College	573	91	14
College Grad.	494	59	12
Unknown/Refused	4	--	--
<b>Household Income</b>			
\$0-\$9,999	76	26	38
\$10,000-\$19,999	259	58	21
\$20,000-\$34,999	602	95	16
\$35,000-\$49,999	432	41	10
\$50,000+	304	33	10
Unknown/Refused	227	28	12
<b>Employment</b>			
Employed for Wages	1149	172	15
Self-Employed	149	22	14
Not Emp. for Wages	173	45	22
Retired	426	41	10
Unknown/Refused	3	1	--
<b>Marital Status</b>			
Married	1077	148	14
Divorced/Separated	264	64	24
Widowed	245	24	10
Never Married/U.C.	302	42	13
Unknown/Refused	12	3	--
<b>Pop. Density</b>			
Urban	820	120	14
Mixed Urban & Rural	713	104	14
Rural	360	56	16
Unknown/Refused	7	1	--

# Table AA: Population Density By County

## 1990 U.S. Census

County	Pop. Density	Pop. Density Classification	County	Pop. Density	Pop. Density Classification
Allen	29.1	Mixed	Linn	13.8	Rural
Anderson	13.4	Rural	Logan	2.9	Rural
Atchison	39.2	Mixed	Lyon	40.8	Mixed
Barber	5.2	Rural	McPherson	30.3	Mixed
Barton	32.9	Mixed	Marion	13.7	Rural
Bourbon	23.5	Mixed	Marshall	13.3	Rural
Brown	19.5	Rural	Meade	4.3	Rural
Butler	35.4	Mixed	Miami	40.7	Mixed
Chase	3.9	Rural	Mitchell	10.3	Rural
Chautauqua	6.9	Rural	Montgomery	60.2	Mixed
Cherokee	36.4	Mixed	Morris	8.9	Rural
Cheyenne	3.2	Rural	Morton	4.8	Rural
Clark	2.5	Rural	Nemaha	14.5	Rural
Clay	14.2	Rural	Neosho	29.8	Mixed
Cloud	15.4	Rural	Ness	3.8	Rural
Coffey	13.3	Rural	Norton	6.8	Rural
Comanche	2.9	Rural	Osage	21.7	Mixed
Cowley	32.8	Mixed	Osborne	5.5	Rural
Crawford	60.0	Mixed	Ottawa	7.8	Rural
Decatur	4.5	Rural	Pawnee	10.0	Rural
Dickinson	22.3	Mixed	Phillips	7.4	Rural
Doniphan	20.7	Mixed	Pottawatomie	19.1	Rural
Douglas	179.0	Urban	Pratt	13.2	Rural
Edwards	6.1	Rural	Rawlins	3.2	Rural
Elk	5.1	Rural	Reno	49.7	Mixed
Ellis	28.9	Mixed	Republic	9.0	Rural
Ellsworth	9.2	Rural	Rice	14.6	Rural
Finney	25.4	Mixed	Riley	110.1	Mixed
Ford	25.0	Mixed	Rooks	6.8	Rural
Franklin	38.3	Mixed	Rush	5.3	Rural
Geary	79.2	Mixed	Russell	8.9	Rural
Gove	3.0	Rural	Saline	68.5	Mixed
Graham	3.9	Rural	Scott	7.4	Rural
Grant	12.5	Rural	Sedgwick	403.6	Urban
Gray	6.2	Rural	Seward	29.3	Mixed
Greeley	2.3	Rural	Shawnee	292.7	Urban
Greenwood	6.9	Rural	Sheridan	3.4	Rural
Hamilton	2.4	Rural	Sherman	6.6	Rural
Harper	8.9	Rural	Smith	5.7	Rural
Harvey	57.5	Mixed	Stafford	6.8	Rural
Haskell	6.7	Rural	Stanton	3.4	Rural
Hodgeman	2.5	Rural	Stevens	6.9	Rural
Jackson	17.5	Rural	Sumner	21.9	Mixed
Jefferson	29.7	Mixed	Thomas	7.7	Rural
Jewell	4.7	Rural	Trego	4.2	Rural
Johnson	744.7	Urban	Wabaunsee	8.3	Rural
Kearney	4.6	Rural	Wallace	2.0	Rural
Kingman	9.6	Rural	Washington	7.9	Rural
Kiowa	5.1	Rural	Wichita	3.8	Rural
Labette	36.5	Mixed	Wilson	17.9	Rural
Lane	3.3	Rural	Woodson	8.2	Rural
Leavenworth	138.9	Mixed	Wyandotte	1,070.0	Urban
Lincoln	5.1	Rural			

Source: Kansas Statistical Abstract 1993-94